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ABSTRACT

With the passage of the Carl D. Perkins Vocational and Technical Education Act of 1998, career and technical education in Colorado entered a new era. This monograph presents the five-year plan for the use of federal vocational funds during fiscal years 2000-2005. As one of a series of plans that interrelate and establish a vision for the Colorado Community College and Occupational Education System (CCCOES), this plan is driven by the Board's Cornerstones. To ensure effectiveness, this plan and those eligible recipients receiving resources under this plan must adhere to the Cornerstones which mark the CCCOES: Accessibility, Learning and Learning-Centered, Community Connectedness, and Market Alignment. This report contains the following sections: Introduction to the Plan, which includes an overview and a discussion of the system cornerstones, regional work teams, and research; Planning, Coordination, and Collaboration, which includes information on public hearings and consultation and activities to allow participation in the state planning process; Program Administration, which looks at activities designed to meet or exceed state adjusted levels of performance and how students' academic and technical skills will be improved; Accountability and Evaluation; Special Populations and Other Groups; Tech Prep; and Financial Requirements, which discusses such items as assurances, compliance, and fund allocation. (Contains 12 appendices.) (VWC)

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THE COLORADO FIVE-YEAR STATE PLAN for CAREER AND TECHNICAL EDUCATION

under the

CARL. D. PERKINS VOCATIONAL AND TECHNICAL EDUCATION ACT OF 1998

Prepared by

The Colorado Community College and Occupational Education System
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PREFACE

With passage of the Carl D. Perkins Vocational and Technical Education Act of 1998, career and technical education in Colorado enters a new era. The legislation greatly expands the flexibility and adaptability of schools and colleges to meet local career and technical education needs. The five-year plan for the use of federal vocational funds during fiscal years 2000 to 2005 also represents a partnership with providers and Colorado's emerging Workforce Investment Act plan, enhancing the ability of Colorado workers and employers to meet the workforce challenges at the dawn of the new millennium.

As one of a series of plans that interrelate and establish a vision for the System, this plan is driven by the Board's Cornerstones. To ensure effectiveness, this plan and those eligible recipients receiving resources under this plan must adhere to the Cornerstones which mark CCCOES: Accessibility, Learning and Learning-Centered, Community Connectedness, and Market Alignment.

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The Colorado State Plan conforms to the requirements of the new federal legislation and provides guidance to the career and technical education community. Fully-implemented, career and technical education programs as required by the Plan will assist in increasing economic opportunities for Colorado, meeting workforce needs, and providing continued educational growth and opportunities for our citizens.

Ralph Torres, Chair
State Board for Community Colleges and Occupational Education

Dorothy A. Horrell, President
Colorado Community College and Occupational Education System

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INTRODUCTION TO THE PLAN

Overview

The Colorado Community College and Occupational Education System (CCCOES) is a national model for the delivery of state-of-the-art academic and career education. Its technical programs in 150 school districts, together with career and academic programs in 13 community colleges and seven other postsecondary institutions serve more than a quarter million students annually.

Since its creation in 1967, the System has guided and supported its member institutions in innovative approaches to developing the state's human resource potential and contributing to its economic growth and vitality. This five-year plan for career and technical education is a demonstration of this commitment and embraces the performance-driven philosophy undergirding the Carl D. Perkins Vocational and Technical Education Act of 1998.

The innovations put into practice today include multiple, sustained partnerships which seek to serve Colorado citizens including offering degrees and instruction over the Internet and offering high-cost. high-tech programs centrally from the Higher Education and Advanced Technology Center. CCCOES also is a full partner in assisting Colorado to develop its plan under the Workforce Investment Act of 1998. The synergy which is created from these partnerships, coupled with a long record of service in the area of career and technical education results in CCCOES designation as Colorado's workforce delivery system.

System Cornerstones

In June 1998, the Colorado State Board for Community Colleges and Occupational Education (SBCCOE) directed that activities throughout the system be organized around four (4) Cornerstones. These Cornerstones are intended to provide the System with sustainable competitive advantage. They are a basis for planning and setting priorities, for charting progress, and to help maintain quality control. CCCOES' Cornerstones are:

- Accessibility
- Learner and Learning-Centered
- Community Connectedness
- Market Alignment

Accessibility means that CCCOES is anticipating and meeting needs by providing "anyone, anytime, anywhere" opportunities for the people we serve. Key elements of accessibility include continuing practices of open admission and reasonable tuition, as well as the ongoing expansion of service delivery in multiple formats, such as distance learning.

Learner and Learning-Centered means recognizing that the most important people to the System are the learners and that their needs drive the decisions made. CCCOES' success in this area is manifested in our vision of being a partner in transforming the lives of the people we serve."

Community Connectedness positions CCCOES' colleges in leadership roles by using the resources of faculty, staff, and students in the service of addressing community issues. It is clear that with this Perkins plan as well as other initiatives that innovative collaborations are required to meet the

changing needs of communities.

Market Alignment CCCOES has prided itself in addressing the needs of employers, but market alignment now also is evident in the practices and behaviors of many of our competitors. This competency requires continual scanning of the external environment, enabling the System to be proactive in identifying, anticipating and responding to the changing needs of students and communities.

Examples of the Accessibility and Learning-Centered Cornerstones which bear directly on this plan for career and technical education include: weekend college courses, tutorial centers, on-line courses, campus child care services, wellness centers, elder care, senior programs, evening courses, GED prep courses, on-line and phone registration services, off-campus/satellite courses, and job placement programs.

Examples of the Community Connectedness Cornerstone related to this Perkins Plan include collaborating with foundations and corporations, partnerships among colleges, partnerships with other state and federal programs, library partnerships within communities, partnering with high schools and school districts, sharing resources with other CCCOES colleges, facilities open to nonprofit groups, provide community organizations meeting space, and technology sharing with industry and other institutions

The Market Alignment Cornerstone also is congruent with this Perkins Plan and provides examples of System progress including collaborating with corporations, providing video classes, seeking alliances with local companies, promoting quality career and technical education programs, web site access to training, noncredit courses, and customized training for industry.

Regional Work Teams

In Spring1999, the Educational Services Division of the Colorado Community College and Occupational Education System reorganized itself into four regional teams. The strategy is to focus on accountability, improved services and program delivery, resource management, and strategic alliances. The teams divide the state into north south east and west quadrants. Membership on the teams consists of at least one representative from four vertical work teams: program innovation/integration, workforce development, student services, and statewide services.

The program innovation/integration vertical team consists of program managers for agriculture education, business and marketing education, consumer and family studies, health occupations, and trade, industrial and technical education along with vocational organization specialists for each of the programmatic areas. The workforce development vertical team includes the director of business and industry, Job Training Partnership Act managers, and CCCOES' liaison with One-Stop Career Centers. The student services vertical team consists of the director of special populations, the director of system student financial aid, job developers for vocational rehabilitation, and the coordinator for gender equity. The fourth vertical team, state services, includes the coordinator of the Colorado Career and Technical Education Resource Center, the state credentialing specialist, the coordinator for federal programs, and coordinator for Tech Prep.

Each regional team will assess needs in its geographical area of responsibility and set performance measures and indicators of success related to enrollment, completion rates, transfer rates (secondary to postsecondary, 2-year to 4-year) and workforce development (job placement rates, training access,

and salary enhancement). Although the regional teams are formed around existing community college services areas, teams will collaborate with the Colorado Department of Education's Regional Service Teams (RST), the Boards of Cooperative Education Services (BOCES), the eighteen (18) existing One-Stop Career Centers, and Regional Workforce Boards. Specific liaisons to each of these entities exist within each team.

These high performing teams will develop activities that support the System's cornerstones and the priorities of the State Board for Community Colleges and Occupational Education, including those programs and services addressed in Colorado's State Plan for Career and Technical Education under the Carl D. Perkins Vocational and Technical Education Act of 1998.

Research

The work envisioned in this plan is informed by a collaborative research agenda that is ongoing and focused. For example, CCCOES in conjunction with the Workforce Coordinating Council, in the Governor's Office, has conducted an analysis of current research on training needs, high-growth industry, and employer consortia. Their policy recommendations include: an aggressive response by the State to increase incentives for training of current and potential employees; proactive involvement with private and public sector efforts to collaborate in addressing workforce development challenges; and policies that are flexible in meeting the needs of diverse regions within the state. These objectives are consistent with the development of this plan.

CCCOES also has developed a report responding to the Metro Denver Network report on high-growth industries in the Front Range, and a tactical plan for meeting the needs of employers. CCCOES conducted interviews with employers to determine education/training needs in 4 high-growth industry areas: Biomedical Products and Devices; Equipment for Telecommunications; Software for Telecommunications; and Computer Storage and Peripherals. This research revealed that community colleges are offering significant coursework at the post-secondary level in these areas, but must be responsive to the time dimensions constraining worker participation in further training. To bring these potentials to reality, CCCOES offers specialized training at the Higher Education Advanced Technology center--a jointly funded college center dedicated to high tech applications in workforce development.

Finally, CCCOES is performing research for the Alfred P. Sloan Foundation to determine the distance delivery training needs of small to mid-sized manufacturers. Research reveals that high-risk' learners can benefit from computer-based (and other) forms of asynchronous training, if certain conditions are met, especially supervisor encouragement. The research produced by this contract interfaces tightly with Perkins III and SBCCOE mandates for instructional technology.

1.0 PLANNING, COORDINATION AND COLLABORATION

1.1 Public Hearings

Appropriate notice of hearings including date, time, and locations was provided to the public through press releases to fifty-four (54) newspapers throughout Colorado (Appendix A) and e-mail correspondence. In addition more than 1,400 special notices were mailed to organizations, institutions, and individuals. Additionally, earlier drafts of this plan were posted on the CCCOES website and an additional 300 letters and e-mail were distributed notifying hearing participants and others of its availability for comment.

DATE	TIME	LOCATION
JANUARY 28	1:30-4:00 pm	Durango School District Administration Building 201 East 12th St. Durango, Colo. (2nd floor conference room)
JANUARY 29	9:30 am - noon	Unified Technical Education Campus (UTEC) 2508 Blichman Avenue Grand Junction, Colo. (Building B, Room 161)
FEBRUARY 2	1:30 - 4:00 pm	Otero Junior College 1802 Colorado Avenue La Junta, Colo. (Macdonald, Room 120)
FEBRUARY 3	9:30 am - noon	Pueblo Community College 900 West Orman Avenue Pueblo, Colo. (Fortino Ballroom)
FEBRUARY 5	9:30 am - noon	Morgan Community College 17800 County Road 20 Fort Morgan, Colo. (Cottonwood, Room 111)
FEBRUARY 9	9:30 am - noon	Front Range Community College Westminster Campus 3645 West 112th Avenue Westminster, Colo. (Library, L211)
FEBRUARY 12	9:30 am - noon	Arapahoe Community College 5900 South Santa Fe Drive Littleton, Colo. (Half Moon Room, M160)

Groups of individuals sent invitations to these hearings include

- Colorado Commission on Higher Education
- Colorado State Board for Education (K-12, except career and technical education)
- Colorado Workforce Coordinating Council
- Directors of One-Stops and Regional Workforce Boards
- Secondary and Postsecondary Career and Technical Education Administrators
- Directors of Area Vocational Schools
- School Board Presidents
- Members of the State Board for Community Colleges and Occupational Education
- Business Key Contacts (as maintained by System Program Managers)
- Colorado AFL/CIO
- Colorado Women's Resource Centers
- Community Based Organizations
- Gender Equity Coordinators

- Tech Prep Advisory Committee

All persons unable to attend these meetings were encouraged to submit written comments about their perspectives on the new Perkins legislation and emerging state plan.

1.2 Summary of Responses to Recommendations from the Public on the State Plan

In general, participants in the public hearings were concerned about the timing of a new local application process, resources made available to rural secondary districts, services to single/teen parents and displaced homemakers formerly provided under the equity provision of Perkins II, and accountability under Perkins III.

1.2.1 New Local Application Process.

Concern. A majority of hearing attendees expressed concern about the timing of the new local applications process and how the development of this plan might impact their work.

Response. CCCOES recognizes that many decisions need to be made at the local level prior to the implementation of Perkins III. CCCOES staff held workshops across the state during the same time frame that open hearings were held in order to brief eligible recipients of changes in the application process and new guidelines under Perkins III. The local application process is underway and will be mailed to the field at the end of April 1999, permitting a full two months to develop local applications.

1.2.2 Distribution of Resources

Concern. Predictably, there was no clear statewide consensus on the distribution of funds between secondary and postsecondary providers. The current split is 60 percent postsecondary and 40 percent secondary. Rural secondary providers indicated that their proportion of funds should increase since it is difficult to operate quality career and technical programs without a critical mass of students and resources.

Response. CCCOES staff will forward a recommendation to continue the current ratio to SBCCOE for approval. Staff also will forward a recommendation to establish a 10 percent reserve fund within the states' basic grant allocation to be targeted to rural providers.

1.2.3. Single/Teen Parents and Displaced Homemakers

Concern. The elimination of equity setasides supporting single parents, displaced homemakers, and single pregnant women and programs to eliminate sex bias in vocational education will result in lack of support for many students currently served through career and technical education.

Response. Local recipients can determine the use of Perkins III funds. If eligible recipients wish to continue present services, they may identify this need and include such services in the local plan. The students to be served must be participating in approved career and technical education programs.

Concern. Perkins III requires a core indicator regarding participation and completion of career and technical education programs that are nontraditional by gender. Yet, funding doesn't flow to progress in this area.

Response. Between $60,000 and $150,000 will be reserved at the state level for assistance in providing direct services to individuals participating in programs nontraditional for their gender. Local plans are also to address how funds will be used to promote nontraditional programs.

1.2.4 Accountability

Concern. The core indicators for attainment of academic and career/technical proficiencies will be difficult to measure when there are no consistent state-established standards.

Response. Although substantial progress has been made under Perkins II to establish measurements for basic skills, academic, and occupational skills, Colorado still lacks "state-established" proficiencies in these areas. In several programmatic areas, specifically, trade, industrial, and technical and consumer and family studies, these proficiencies are largely in place. However, there remains much work to be done across other program areas. Consequently, this plan envisions a process in which eligible recipients are involved with state staff in establishing common proficiencies for career and technical programs.

Concern. CCCOES should use the statewide testing program established by the Colorado Department of Education to report academic proficiencies by secondary students.

Response. The intent of this core indicator is to demonstrate that career and technical education students are provided the same level of rigor as are other students. However, CDE's testing program concludes at the 10^{th} grade level, before nearly all secondary career and technical students enter programs. Thus, these data cannot be used to report attainment of skills, but may have potential as a baseline measure.

1.3 Consultation and Activities to Allow Participation in the State Planning

CCCOES has solicited ongoing review and comment on the state plan throughout its development. In addition to the public hearings discussed above, CCCOES staff have actively sought input from the Governor's Office, the Executive Director of the Colorado Commission on Higher Education, Colorado Department of Education, the Colorado Department of Labor and Employment, and the Director of the State's Workforce Coordinating Council. Additionally, this document was first posted to the CCCOES website for public review and comment on March 13, 1999. Agency heads consulted on the development of this plan include: Mr. Timothy Foster, Executive Director of the Colorado Commission on Higher Education, Ms. Vicky Armstrong, Executive Director of the Colorado Department of Labor and Employment, Mr. William Maloney, Director of the Colorado Department of Education (K-12), Mr. Clark Bolser, Executive Director of the Colorado Workforce Coordinating Council and Ms. Terry Rayburn, Senior Education Advisor to the Governor. The Honorable Bill Owens, Governor of Colorado, also approved this plan as required by federal statute.

Discussions with parents, students, and other interested individuals during the development of this plan were held at the local level, either coordinated by state staff or occurring within existing local advisory and school meetings at which state staff were present. Additionally, local administrators were encouraged to involve parents and students within the development of their local plans. Efforts to assist local recipients to draft their new plans began at the same time statewide hearings for Perkins were conducted. The result was that local plan development also drew in large discussions about Perkins III and how new federal requirements would necessitate action at the local level. The business

and marketing state staff, for example, conducted more than 35 regional inservices throughout Colorado. These sessions were attended by advisory committee members consisting of parents and business representatives. Career and technical teachers also were invited to the seven statewide open hearings and at presentations made at the annual Colorado Association of Vocational Administrators Conference. Finally, adequate public notice was ensured by the breadth of press releases disseminated publicizing open hearings and through encouraging local directors of career and technical education to inform students and parents of these hearings.

Consultation also was held with a committee of practitioners with responsibility for accountability. This group was convened before Perkins III legislation was finalized. This group provided excellent feedback in the operationalization of core indicators.

Secondary Representatives

Dr. Sharron Carosella, Emily Griffith Opportunity School, Denver Public Schools
Ms. Laurie Maxson, El Paso School District #11, Colorado Springs
Mr. Dick Lightner, Jefferson County School District
Dr. Nancy Wear, Thompson School District

Postsecondary Representatives

Ms. Diane Cyr, Community College of Denver
Ms. Pat McGuire, Aims Community College
Dr. Ben Yohe, Red Rocks Community College

CCCOES Staff Representatives

Ms. Caryll Cramm
Dr. Samuel Dosumu
Mr. Jerry Lillard
Dr. Peg Rooney
Dr. Rick Voorhees
Ms. Norma Zarlow

External state agency stakeholders consulted include Mr. Timothy E. Foster, Executive Director of the Colorado Commission on Higher Education; Dr. Bill Maloney, Colorado Department of Education; Ms. Terri Rayburn, Senior Policy Analyst, Governor's Office;; and Ms. Vicky Armstrong, Executive Director of the Colorado Department of Labor and Employment.

This plan was approved by the State Board for Community Colleges and Occupational Education at its April 15, 1999 meeting (See Appendix B for documentation). This plan was also approved by Bill Owens, Governor of Colorado (See Appendix C for documentation).

1.4 Secondary-Postsecondary State Agency Collaboration

The Colorado Community College and Occupational Education System (CCCOES) is the state agency responsible for the administration of the Carl D. Perkins Vocational and Technical Education Act of 1998, including supervision of career and technical education in secondary and postsecondary schools. CCCOES supervises all career and technical education in Colorado. This unique governance

structure ensures that effective communication between sectors can occur to promote career and technical education within the framework of Perkins legislation. Even so, CCCOES staff have been instrumental in assisting the Colorado Department of Education's (CDE's) efforts in key areas.

Accreditation. CCCOES staff have assisted CDE to establish a technical assistance model for K-12 providers in Colorado. The ultimate aim of this effort was to provide mechanisms by which elementary and secondary schools could meet new statewide, standards-based accreditation criteria.

School-to-Work Opportunities Act. A variety of State level activities are evolving at a rapid pace to support efforts under development with the School-to-Work Opportunities Act. This initiative has spurred significant state level collaboration and coordination over the past few years and has created a common need for state agencies to address Colorado's School-to-Career Partnership in a unified manner. The Governor's office is spearheading the initiative and CCCOES has been identified as one of the agencies to work on this initiative. Other agencies involved in planning aspects include the Colorado Department of Education, the Colorado Department of Labor, Colorado Commission on Higher Education, and Vocational Rehabilitation. These agencies along with the School-to-Career Office staff of Director, Deputy Director and Assistant make up the state level Interagency Team. Six regional coordinators address 91 local partnerships throughout the state regionally. They adhere to a 10 to 15 members Regional Council consisting of at least 51 percent business persons.

CCCOES will make every reasonable effort to work with state agencies with an interest in workforce development to collaborate with joint programming and to ensure that federal and state dollars are spent in a cost-efficient and performance-based manner.

2.0 PROGRAM ADMINISTRATION

2.1 Activities Designed to Meet or Exceed State Adjusted Levels of Performance

This section describes the activities designed to meet or exceed state adjusted levels of performance which include the programs to be carried out, the criteria that will be used to

approve local applications, how students will be prepared for post-program opportunities, and how funds will be used for new career and technical Education (CTE) courses.

2. 1. 1 Secondary and Postsecondary Career and Technical Education Programs To Be Carried Out, Including Those That Develop, Improve, and Enhance Access to Quality, State-of-the-Art Technology

The criteria for approving the following programs include quality indicators for developing, improving, and expanding access to quality state-of-the-art technology. The following programs will be eligible for funding at the local level provided that the decision to do so is related to a continuous program improvement process aimed at improving student performance on the core indicators specified in this plan.

Several statewide initiatives are underway to provide both secondary and postsecondary career and technical students access to state-of-the art technology as part of their programs. On the secondary level, programs within the business and marketing area which are responsive to tomorrow's workplace include logistics and transportation, multi-media operations, telecommunications, and business systems networking. Although these programs are reported under the broad federal

categories of business and marketing, they represent bold, new thinking about secondary school preparation. On the postsecondary side, many new initiatives are underway. More than 54,000 course enrollments were recorded in the 1998-99 year by state system community colleges in information technology and closely-related fields. Each CCCOES postsecondary institution is host to a CISCO Academy, a partnership with CISCO which provides for state-of-the-art training in computer network technology. Other significant programs have been developed in metrology, photo vacuum technology, robotics, advanced machining, and integrated circuit fabrication.

Table 1

SECONDARY AND POSTSECONDARY PROGRAMS (by CIP Codes)

CIP Code	Program Names	Secondary	Post-secondary
1.0101	AGRICULTURAL BUS./MANAGEMENT, GEN.	0	1
1.0102	AGRICULTURAL BUS./AGRIBUSINESS. OPERATIONS	0	3
1.0104	FARM & RANCH MANAGEMENT	0	10
1.0201	AGRICULTURAL MECHANIZATION, GENERAL	0	1
1.0204	AG. POWER MACHINERY OPERATOR	1	1
1.0301	AG. PROD. WORKERS/MANAGERS., GEN.	0	1
1.0303	AQUACULTURE OPERATIONS./PROD. MANAGEMENT	0	1
1.0401	AG. & FOOD PRODUCTS PROCESSING	0	1
1.0501	AG. SUPPLIES RETAIL/WHOLESALE	0	1
1.0505	ANIMAL TRAINER	0	1
1.0599	AG. SUPPLIES/SERVICES, OTHER	0	1
1.0601	HORTICULTURE OPERATIONS./MANAGEMENT, GEN.	8	7
1.0605	LANDSCAPING OPERATIONS/MANAGEMENT	0	1
1.9999	AGRIBUSINESS/AGRICULTURE PRODUCTS	82	7
2.0101	AGRICULTURAL SCIENCES, GENERAL	0	1
2.0201	ANIMAL SCIENCES, GENERAL	0	1
2.0203	ANIMAL HEALTH	1	1
2.0299	ANIMAL SCIENCES, OTHER	0	1
3.0203	NAT. RES. LAW ENFORCEMENT./PROTECTION	0	1
3.0299	NAT. RES. MANAGEMENT/PROTECTION, OTHER	2	2
3.0601	WILDLIFE/WILDLANDS MANAGEMENT	1	1
8.0204	BUSINESS SERVICES MARKETING	0	1
8.0708	GENERAL MARKETING OPERATIONS	0	1
8.0901	HOSPITALITY/RECREATION MKTG.	0	1
8.1001	INSURANCE MARKETING	0	1
8.1104	TOURISM PROMOTION	1	1
8.1105	TRAVEL SERVICES MARKETING	3	4
8.9999	MARKETING & DISTRIBUTION, OTHER	77	1
9.9999	COMMUNICATIONS, OTHER	0	3

10.0101 EDUCATIONAL/INSTRUCTIONAL MEDIA	1	1
10.0104 RADIO/TV BROADCAST. TECH./TECHNICIAN	2	5
10.0199 COMMUNICATION TECH./TECHNICIAN, OTHER	3	2
12.0301 FUNERAL SERVICES. / MORTUARY SCI.	0	1
12.0402 BARBER/HAIRSTYLIST	1	3
12.0403 COSMETOLOGIST	32	7
12.0405 MASSAGE	0	2
12.0499 COSMETIC SERVICES, OTHER	0	1
12.0506 MEATCUTTER	0	1
13.1202 TEACHER EDUC. - ELEMENTARY ED.	0	1
15.0101 ARCHITECT./ENGINEER. TECH./TECHNIC AN	0	4
15.0201 CIVIL ENGINEERING / CIVIL TECH./TECHNIC AN	0	1
15.0301 COMPUTER ENGINEERING TECH./TECHNICIAN	2	1
15.0303 ELECTRIC./ELECTRONIC./COMMUNICATION ENGINR.	5	12
15.0304 LASER/OPTIC TECH./TECHNICIAN	0	1
15.0399 ELEC./ELECTRONIC. ENGINEER. RELATED	0	1
15.0402 COMPUTER MAINTENANCE TECHNOLOGY	1	0
15.0404 INSTRUMENTATION TECH./TECHNICIAN	0	1
15.0501 HEATING, AIR COND., & REFRIGERATION.	1	5
15.0506 WATER QUALITY/WASTEWATER TREATMENT	0	2
15.0507 ENVIRON./POLLUTION CONTROL TECH.	5	4
15.0599 ENVIRONMENTAL CONTROL TECH	0	1
15.0603 INDUSTRIAL/MFG. TECH./TECHNICIAN	0	1
15.0699 INDUSTRIAL PROD. TECHNICIAN	0	2
15.0701 OCCUPATIONAL. SAFETY/HEALTH TECH	0	3
15.0805 MECHANICAL ENGINEERING TECHNICIAN	1	1
15.0901 MINING TECH./TECHNICIAN	0	1
15.9999 ENGINEERING-REL. TECH./TECHNICIAN	16	3
19.0705 GERONTOLOGY	0	1
20.0101 CORE - CONSUMER & FAMILY	164	1
20.0201 CHILD CARE/GUIDANCE WORKERS MANAGERS	2	14
20.0202 CHILD CARE PROVIDER/ASSISTANT	29	0
20.0203 CHILD CARE SERVICES MANAGER	0	13
20.0301 CLOTHING/APPAREL/TEXTILE WORKER/MANAGER	0	1
20.0303 COMMERCIAL GARMENT/APPAREL WORKER.	0	1
20.0401 INSTITUTIONAL FOOD WORKERS/ADMINISTRATION	8	6
20.0402 PRO-START/FOOD MANAGEMENT/HOSPITALITY	4	0
20.0404 DIETICIAN ASSISTANT	0	1
20.0405 FOOD CATERER	11	1
20.0406 FOOD SCI., NUTRITION, DIETETICS	1	0
20.0499 INSTITUTIONAL FOOD WORKERS/ADMIN., OTHER	1	1

20.0501 HOME FURNISH./EQUIPMENT INSTALLER	0	1
20.0604 CUSTODIAN/CARETAKER	1	6
20.9999 VOCATIONAL HOME ECONOMICS, OTHER	27	0
22.0103 PARALEGAL/LEGAL ASSISTANT	0	7
30.9999 ESSENTIAL SKILLS FOR WORKPLACE	0	6
31.0101 PARKS/RECREATION/LEISURE STUDY	0	1
31.0301 PARKS/RECREATION./LEISURE FACILITIES .MGT	0	1
31.0599 HEALTH/PHYSICAL EDUC./FITNESS	1	2
41.0101 BIOLOGICAL TECH./TECHNICIAN	0	1
43.0102 CORRECTIONS/CORRECTIONAL ADMIN.	0	1
43.0103 CRIMINAL JUSTICE/LAW ENFORCEMENT. ADMIN.	1	12
43.0107 LAW ENFORCEMENT/POLICE SCIENCE	0	5
43.0201 FIRE PROTECT./SAFETY TECHNOLOGY/TECHNICIAN	0	6
43.0299 FIRE PROTECTION, OTHER	0	1
44.9999 PUBLIC ADMIN./SERVICES, OTHER	0	1
45.0601 ECONOMICS	0	1
46.0101 MASON & TILE SETTER	2	0
46.0201 CARPENTER	10	6
46.0302 ELECTRICIAN	1	3
46.0303 LINEWORKER	0	1
46.0401 BUILDING/PROPERTY MAINTENANCE/MANAGER	1	0
46.0408 PAINTER & WALL COVERER	1	0
46.0499 CONST./BLDG. FINISHERS/MANAGERS	0	2
46.9999 CONSTRUCTION TRADES, OTHER	15	5
47.0102 BUSINESS MACHINE REPAIRER	0	1
47.0103 COMMUNICATIONS SYSTEMS INSTAL/REPAIR	1	0
47.0104 COMPUTER INSTALLER/REPAIRER	3	1
47.0106 MAJOR APPLIANCE INSTAL/REPAIRER	2	2
47.0201 HEATING/AIR COND./REFRIGERATION MECHANIC.	1	1
47.0302 HEAVY EQUIP. MAINTENANCE./REPAIRER	0	2
47.0303 INDUSTRIAL MACHINERY MAINTENANCE./REPAIR	2	3
47.0402 GUNSMITH	0	1
47.0408 WATCH/CLOCK/JEWELRY REPAIRER	0	1
47.0603 AUTO/AUTOMOTIVE BODY REPAIR	9	8
47.0604 AUTO/AUTOMOTIVE MECHANIC/TECHNICIAN.	36	14
47.0605 DIESEL ENGINE MECHANIC/REPAIRER	1	2
47.0606 SMALL ENGINE MECHANIC/REPAIRER	2	1
47.0608 AIRCRAFT MECH./TECHNICAN, POWER PLANT	1	3
47.0699 VEHICLE./MOBILE EQUIPMENT. MECH./REPAIR OTHER	1	1
47.9999 MECHANICS/REPAIRERS, OTHER	1	1
48.0101 DRAFTING, GENERAL	17	13

48.0199 DRAFTING, OTHER	1	0
48.0201 GRAPHIC/PRINTING EQUIPMENT OPERATOR	10	3
48.0299 GRAPHIC/PRINTING EQUIPMENT OPERATOR,,OTHER	1	0
48.0303 UPHOLSTERER	0	1
48.0501 MACHINIST/MACHINE TECHNOLOGIST	1	1
48.0503 MACHINE SHOP ASSISTANT	7	8
48.0506 SHEET METAL WORKER	0	1
48.0508 WELDER/WELDING TECHNOLOGIST	16	12
48.0703 CABINET MAKER/MILLWORKER	3	2
49.0102 AIRCRAFT PILOT/NAVIGATOR (PROF.)	0	2
49.0104 AVIATION MANAGEMENT	0	1
49.0202 CONSTRUCTION EQUIPMENT OPERATOR	0	1
49.9999 TRANSPORTATION./MATERIAL MOVING, OTHER.	0	2
50.0401 DESIGN & VISUAL COMMUNICATIONS	3	7
50.0402 GRAPHIC DESIGN/COMM. ART/ILLUSTRATION	8	8
50.0406 COMMERCIAL PHOTOGRAPHY	2	2
50.0407 FASHION DESIGN/ILLUSTRATION	1	0
50.0408 INTERIOR DESIGN	0	2
50.0502 TECHNICAL THEATRE /DESIGN/STAGE, OTHER	1	0
50.0599 DRAMATIC/THEATER ARTS/STAGECRAFT	0	1
50.0602 FILM-VIDEO MAKING/CINEMATOGRAPHY	0	1
50.0713 METAL & JEWELRY ARTS	0	1
51.0205 SIGN LANGUAGE INTERPRETER	0	4
51.0601 DENTAL ASSISTANT	2	6
51.0602 DENTAL HYGIENIST	0	3
51.0603 DENTAL LABORATORY TECHNICIAN	0	1
51.0699 DENTAL SERVICES, OTHER	1	1
51.0705 MEDICAL OFFICE MANAGEMENT	0	9
51.0707 MEDICAL RECORDS TECH./TECHNICIAN	0	1
51.0799 HEALTH/MEDICAL ADMIN. SERVICES, OTHER	0	1
51.0801 MEDICAL ASSISTANT	0	1
51.0803 OCCUPATIONAL THERAPY ASSISTANT	0	3
51.0805 PHARMACY TECHNICIAN/ASSISTANT	0	2
51.0806 PHYSICAL THERAPY ASSISTANT	0	3
51.0807 PHYSICIAN ASSISTANT	0	1
51.0904 EMERGENCY MED. TECH./TECHNICIAN	0	12
51.0907 MEDICAL RADIOLOGIC TECH./TECHNICIAN.	0	5
51.0908 RESPIRATORY THERAPY TECHNICIAN	0	3
51.0909 SURGICAL/OPERATING ROOM TECHNICIAN	0	2
51.1003 HEMATOLOGY TECH./TECHNICIAN	0	1
51.1004 MEDICAL LABORATORY TECHNICIAN	0	1

51.1502 PSYCHIATRIC/MENTAL HEALTH SERVICES TECH	0	4
51.1599 MENTAL HEALTH SERVICES, OTHER	0	1
51.1601 NURSING (R.N. TRAINING)	0	9
51.1613 PRACTICAL NURSE (LPN TRAINING)	0	14
51.1614 NURSE ASSISTANT/AIDE	2	10
51.1615 HOME HEALTH AIDE	0	2
51.1699 NURSING, OTHER	0	2
51.1801 OPTICIAN DISPENSING/OPTICIAN	0	1
51.1803 OPHTHALMIC MEDICAL TECHNOLOGIST	0	1
51.1899 OPHTHALMIC/OPTOMETRIC SERVICES., OTHER	1	1
51.2601 HEALTH AIDE	1	1
51.9999 HEALTH PROFESSION./RELATED SCIENCES	16	4
52.0201 BUSINESS ADMINISTRATION	0	16
52.0204 OFFICE SUPERVISION & MANAGEMENT	0	3
52.0299 BUSINESS MANAGEMENT	0	8
52.0302 ACCOUNTING TECHNICIAN	2	11
52.0401 ADMINISTRATIVE ASSISTANT/ SECRETARIAL SCI.	219	16
52.0402 EXECUTIVE ASSISTANT/SECRETARY	0	1
52.0404 MEDICAL ADMIN. ASST./SECRETARY	0	1
52.0407 INFO. PROCESS./DATA ENTRY TECHNICIAN	0	2
52.0408 GENERAL OFFICE/CLERICAL & TYPING	2	3
52.0701 ENTERPRISE MANAGEMENT/OPERATION	0	6
52.0801 FINANCE, GENERAL	1	0
52.0803 BANKING/FINANCIAL SUPPORT SERVICES	0	3
52.0805 INSURANCE & RISK MANAGEMENT	0	1
52.0903 TRAVEL/TOURISM MANAGEMENT	0	3
52.1101 INTERNATIONAL BUSINESS	0	1
52.1201 MANAGEMENT INFORMATION SYSTEMS	3	13
52.1202 BUSINESS COMPUTER PROGRAMMING	1	2
52.1204 BUS. SYSTEM. NETWORKING/TELECOMMUNICATIONS	1	15
52.1401 BUSINESS MARKETING / MKTG. MANAGEMENT	0	6
52.1501 REAL ESTATE	0	2
99.1700 INDUSTRIAL COOPERATIVE EDUCATION	2	0
99.8000 ALTERNATIVE COOPERATIVE EDUC.	121	0
99.8100 MULTI-OCCUPATIONAL COOP	17	0

2.1.2 Criteria for Improving Local Applications

Applications submitted to CCCOES by eligible recipients for approval and funding of programs, services, and activities under Perkins III will be reviewed by State Board staff assigned to administer those projects. The steps below and associated criteria appear also in CCCOES' Local Plan Guidelines for Secondary and Postsecondary Recipients (Appendix D).

- Applications based on the published local plan guidelines will be due at CCCOES on or before June 30th of the fiscal year preceding the fiscal year to be funded.
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- Applications will be logged in and will be routed to appropriate staff.
-
- Fiscal staff will identify any unallowable expenditures during their review of the budget, budget summary and payment pages. Fiscal staff will sign off on budgets when they are correct.

- CCCOES staff assigned to the individual projects will review the applications for program related issues. Staff will check local performance goals against the previous year's performance and against the statewide performance goals to ensure that the local performance goals represent sufficient progress toward meeting or exceeding, the state's performance goals. Applications will only be approved when the eligible recipient has set appropriate performance goals. CCCOES staff will also review the application narrative to ensure that activities support the requirements and intent of the Perkins III legislation. In particular, staff will review core indicators, adjusted performance levels, program quality indicators, and strategies and activities to meet performance levels. Additionally, all local applicants are required to obtain a letter of support from One-Stop Service Centers operating in their service areas and to submit that letter with their local plans.
- Upon final negotiation and recommendation by CCCOES staff, the applications will be routed to the Vice President for Educational Services who serves as state director of career and technical education for final review and approval. Once approved, the individual program will be forwarded to the State Board for Community Colleges and Occupational Education for final approval. Given this approval, notification will be transmitted to the eligible recipient. A second copy of the application will be filed at CCCOES and will be maintained by the CCCOES staff assigned to administer the project.

2.1.3 How Programs Will Prepare Career and Technical Education Students for Opportunities in Postsecondary Education or Entry into High-Skill, High-Wage Jobs in Current and Emerging Occupations

Programs will prepare students for post-high school opportunities by ensuring, they are equipped with: 1) a solid foundation of academic skills and the ability to apply those skills in advanced education, training and employment; 2) workplace skills, including work ethic, employability skills, and higher-order thinking skills; 3) technical competencies, including computer proficiencies; 4) work-based learning; and 5) educational credentials and certificates.

There is great awareness that the programs offered to citizens of Colorado must be relevant, current, and addressing documented workforce needs. Toward this end, System staff has generated recent research which traces emerging employment fields as well as the capacity of System community colleges to deliver corresponding training (Appendix E). The results of this study are used to guide strategic planning at the System level in addressing issues of program duplication, centers of excellence, and new initiatives. This, in conjunction with the System's investment in other high-tech, high-skill training and ongoing program review process provides a strong mechanism to ensure that career and technical programs approved by the State Board for Community Colleges and Occupational Education are relevant and meet emerging needs.

Change also is driven through physical structures. The System Initiative at Lowry and the Higher

Education Advanced Technology Center. The Higher Education and Advanced Technology (HEAT) Center traces its beginnings to the closure of Lowry Air Force Base in 1992. Lowry Air Force Base served the Air Force, other military services, and friendly foreign governments by providing state-of-the-art technical training to more than 30,000 personnel each year. Before formal closure, the communities of Denver and Aurora, in concert with the Colorado Community College and Occupational Education System (CCCOES) began to plan for the use of this 1,866 acre military reservation. Acknowledging the imperative to provide laboratory-based learning opportunities for increased applications of advanced technology, CCCOES moved quickly to acquire this property and began to develop a new educational site. On August 1, 1994, following extensive negotiations with the Air Force, 153 acres, 30 buildings, and more than 500,000 square feet of instructional space were conveyed to the State Board for Community Colleges and Occupational Education for use as an educational site. In the early planning stages, this location was known as the Lowry Higher Education Center. Later, in recognition of its intended role in technology of an advanced or emerging nature, and in conjunction with business leaders in the Denver area, this location was named, the Higher Education and Advanced Technology (HEAT) Center. The HEAT Center is not and has no plans to become a degree or certificate granting institution of higher education. Rather, it is a collection of diverse institutions and organizations, both private and public, including community colleges, comprehensive 4-year institutions, and research universities.

The HEAT Center is both a location and a catalyst for creating advanced technology opportunities for Colorado and the Rocky Mountain Region. Its purpose is to develop a technology environment of facilities, laboratories, models, demonstrations, and business opportunities undergirded by open systems of telecommunications and information networking for virtual teaching and on-site learning. The HEAT Center will make heavy use of cybertechnologies in Colorado, throughout the nation, and internationally. The goals of the HEAT Center are to add value to existing higher education programming in Colorado through:

- Fostering inter-agency public/private partnerships
- Providing world-class, high-performance technology systems and application-based learning environments
- Creating interdisciplinary learning experiences for technician, engineering, and business students
- Incorporating the National Skills Standards initiative for advanced technology programming
- Providing high-performance, technology-intensive learning environments
- Providing a technology transfer support environment for small manufacturing and service entities
- Providing a technology vendor showcase within the learning environment
- Establishing processes that encourage technology incubation
- Creating a professional development center for faculty, staff, and trainers focused on selected technologies
- Creating a center for teaching and learning excellence focused on innovative technology-influenced learning strategies

Yet another resource bearing on career and technical education is the Education Technology Training Center (ETTC), also located at Lowry. This center provides state of the art technology and expertise to educators and others who wish to implement technology for the improvement of instruction. Center users learn to employ and create video, CD ROM, Internet, video-conferencing, cable, multimedia, and other present and future technology products to provide a richer and more interactive curriculum with unlimited access potential for learners. The center is located on the Higher Education

and Advanced Technology Center at Lowry, a dynamic, multi-technology campus for CCCOES.

The primary users of the ETTC are instructional designers, K-12 and higher education faculty, and educational administrators. Other users from business and industry have opportunities to learn the technology that will improve their products and services. The ETTC is staffed by telecommunications and electronic multimedia industry experts, who train faculty and other users in the use and production of technology products. ETTC is a world-class television and multimedia production facility for educational applications. Educators from around the globe travel to Colorado to learn how to produce and integrate effective video and multimedia presentations in everyday education settings. The center is a completely digital facility and includes:

- Smart classrooms for multimedia training
- Individual multimedia production work stations for independent production
- TV production studio/stage with hard cyclorama
- Control room and audio suite
- Off-line and Online editing suites
- Graphics/animation suite
- Demonstration and conference rooms
- Video conferencing
-

Academic Skill Foundation. The overall goal of Colorado schools is to have all students acquire a foundation of basic academic skills by the time they complete the tenth grade. This foundation is essential to pursuing advanced academic skill development and CTE. Therefore, all students entering training-level career and technical courses in eleventh grade will be expected to have met the statewide academic standards as prescribed by the Colorado Department of Education. Secondary schools are expected to work with students who have not met these standards to ensure that they will meet them prior to graduation.

All CTE students will be provided learning experiences to improve their academic skills. Programs will be based on the integration of academic and technical skill development. This will be done through classroom and work-based learning activities that provide numerous opportunities for contextual learning and application of academic skills. Learning activities will also be designed to challenge students to use higher order thinking skills such as decision making, problem solving, evaluating, synthesizing, critiquing, and analyzing. Students will also be encouraged to take more and increasingly challenging academic courses, which will also provide opportunities for applied and contextual learning.

Workplace Skill Development. For students to be successful in the workplace, it is essential that they have acquired a number of personal and intellectual attributes that distinguish them as valued and productive individuals. Developing a work ethic and personal characteristics such as integrity, dependability, industry, conscientiousness, and loyalty cannot be accomplished by taking a course or two. Instead, workplace skill development is woven throughout the CTE curricula. Also, Colorado' Learning Standards are infused with workplace basics. Consequently, all school teaching and learning experiences from kindergarten through grade 12 provide opportunities to develop and reinforce these workplace basics.

Technical Competencies. . CTE courses in secondary schools emphasize occupational skills that are transferable across all occupations within an occupational cluster and well as technical skills that are

generic to all occupations. These skills will give students a good foundation of technical competence while enabling them to investigate a number of career pathways while still in high school.

CTE courses at the postsecondary level builds on occupationally transferable skills through the development of occupationally specific skills. Community college occupational students are able to prepare for entry into all of the technical occupations available in Colorado. The colleges provide various pathways from customized course of study for students needing only a few technical courses to occupational certificate and associate of applied science degree programs. These pathways include the finest level of occupational and technical education available in the country.

Work-Based Learning. Developing a resume of work-based learning and work experiences in an industry is particularly important, especially as students become more focused on their career plans. Programs providing these experiences will stress the importance of rotating through as many positions and job duties as possible.

To be most effective these work-based learning activities need to be planned, structured, supervised by a workplace mentor, and analyzed during periods of reflection to determine what learning that has taken place. The quality and learning at the workplace should be no less rigorous than it is in the classroom. The workplace is a logical extension of the classroom, providing a laboratory to apply academic and technical knowledge, theory and skills. As students progress through secondary and postsecondary levels of instruction, these work-based learning activities need to build upon one another. CCCOES requires competency-based training plans.

Educational Credentials and Certificates. Students need to be aware of building and strengthening their resumes by acquiring educational credentials and certificates appropriate to entry and progression in their chosen careers. During the high school years, all students need to obtain a high school diploma because not having one is a strong negative signal to employers and is likely to have a poor effect on hiring decisions. To the extent possible, secondary programs need to provide certificates of knowledge, skills and experiences that document that their students are prepared to benefit from advanced training and enter employment. Postsecondary programs in Colorado represent a broad array of degrees and occupational certificates that program completers can use in pursuing their careers.

2.1.4 How Funds Will Be Used to Improve or Develop New Courses

Local practitioners develop new CTE courses at the secondary and postsecondary level. CCCOES staff and the Colorado Career and Technical Education Resource Library staff provide technical assistance and resources to assist local staff. A major effort is also underway in Colorado to establish industry-based occupational skill standards for various CTE program areas. As these skill standards are implemented, state staff provide them to local programs. Local efforts then commence to assure that program course content aligns with the occupational skill standards. In some instances, current course content is deleted and new content is added. In other instances, new courses are added where more instructional time is needed to address the desired skill standards.

When new career and technical programs are proposed, System staff review all material submitted by eligible recipients, including individual courses which comprise given programs. Although SBCCOE does not approve individual courses, new programs frequently contain new coursework, especially in emerging technology areas. Further, among other criteria, each new program and program renewal must demonstrate labor market need. System staff, working with data provided by the State

Occupational Information Coordinating Committee director, scrutinize statewide and local labor demand information as part of the review process. The labor market database, including labor forecasts by county, also is available to the general public on the Internet at http://www.cosoicc.org.

2.2 How Comprehensive Professional Development Will Be Provided

Various professional development activities (including preservice education) for CTE, academic, guidance and administrative personnel ensure that such personnel enter the field and remain current with the needs and expectations of employers who provide employment opportunities for students. There is considerable state and federal funding available for various professional development activities. CCCOES will continue to promote the coordination of opportunities available through the various fund sources. The primary obstacle to professional development is time away from the classroom. There is also a need to alter some opportunities from short-term events to longer-term, in-depth opportunities with specific outcomes that result in improved student performance.

Like most states, Colorado is facing a serious shortage of qualified CTE teachers to fill vacancies and program expansion needs. CCCOES plans to expand efforts with teacher training institution to address the shortage of qualified CTE instructional staff. Initial efforts will focus on identifying incentives that will address the shortage. Efforts to expand partnerships between community college associate degree programs and teacher training programs at universities will be explored. CCCOES will continue to address the problem in conjunction with Colorado State University, the state's primary higher education provider of career and technical teachers and administrators. The issue also will be addressed at the Board level for each public community college as well as through continued dialog with both the Colorado Department of Education and the Colorado Commission on Higher Education.

In addition to the shortage, CCCOES staff will address the need to upgrade existing teacher education programs to include skills related to technology, work-based learning experiences and the integration of academic and CTE.

Professional development for instructors, guidance personnel and administrators will continue in a wide array of opportunities. Various Perkins III performance provisions will require teachers and administrators to upgrade skills in the following areas:

- integration of CTE and academic course offerings
- incorporating instruction in all aspects of the industry into the curriculum
- using technology
- improving local program evaluation
- enhancing articulation efforts
- providing student support services
- expanding gender equity opportunities
- increasing guidance service to students
- assuring program coordination

State Leadership and local funds will be used to facilitate intensive staff development in the above areas through:

- Professional development leadership, organization and coordination efforts by CCCOES.
- Coordinated efforts among universities as both providers and receivers of professional

development.

- Summer, Saturday and other "after school" workshops appropriate to the audiences.
- Incentives such as stipends and paid tuition for varieties of difficult-to- serve audiences.
-

CCCOES will also pursue means for appropriate involvement of System staff with the regional centers operated by the Colorado Department of Education. These centers are now being developed and are consistent with CCCOES recent reorganization directed at crosscutting professional teams that would serve secondary and postsecondary CTE needs on a regional basis (see Appendix F for a description of CCCOES regional teams). Such collaboration will permit professional development opportunities for CTE staff, academic staff, administrators and guidance personnel at the local level. Efforts will also be undertaken to promote and showcase secondary regional system and community college comprehensive professional development plans. Local plan guidelines require the above entities to provide such a plan in their annual submittal.

2.3 How Stakeholders Will Be Involved in Plan Development, Implementation, and Evaluation of Programs

The development, implementation and evaluation of programs at the state and local levels involve different mixes of activities and partners depending upon the needs and circumstances surrounding the programs in question. Almost all major state plan work groups associated with development, implementation and evaluation of programs include all of these stakeholders. The following matrix summarizes how parents, teachers, small- and medium-sized local businesses, and labor organizations are involved in the plan development, implementation, and evaluation of CTE programs.

Table 2

Stakeholder Involvement in Programs

	Plan Development	Implementation	Evaluation
Students	Input into curricula and support services	Active participation in the learning process	Feedback on quality of instruction and services
Parents	Ensuring that student needs are met	Mentoring Support	Assist in evaluating data for meeting student needs
Teachers	Develop learning activities	Deliver learning opportunities	Monitor CTE programs for continuous quality improvement
Business & Labor	Ensuring that CTE offerings are relevant Develop work-based learning opportunities	Provide work-based learning activities Serve as mentors Serve on CTE program advisory meetings	Provide follow-up data on student performance and retention Evaluate work-based learning Interpret labor market data

2.4 How Students' Academic and Technical Skills Will Be Improved

The academic and technical skills of students participating in CTE programs will be improved by

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strengthening those programs through an aggressive program of integration of academics with CTE to ensure learning in the core academic and career and technical education subjects, and through strong experience in and understanding of all aspects of an industry.

2.4.1 Integration of Academics with Career and Technical Education

CCCOES has assumed a leadership role in integrating Career and Technical Education with academics. System staff have been involved planning the National Integration Conference held each year in Colorado. Further, each program reviewed for initial approval or continuance by System staff must evidence this integration. Perkins II Standards and Measures providing that each program provide evidence of applied academic skills was the foundation for this review and will continue under Perkins III.

The research on course-taking patterns has made a strong case for strengthening the academic skills of all students. The more academic and technical courses taken and the more rigorous they are, the more successful students are in furthering their education and in getting and advancing in employment. Therefore, all students concentrating in CTE are encouraged to take a challenging program of study while in high school or community college.

Similarly, the research on contextual learning has shown that knowledge and skills are more likely to be acquired, applied and retained if the teaching and learning process integrates all relevant bodies of knowledge and skill development and is rich in a variety of educational environments. Colorado has invested large amounts of federal and state funds in the professional development of both academic and CTE teachers. All secondary and postsecondary programs need to utilize integration methods.

All curriculum and instructional development activities pay close attention to integration activities and to providing as many opportunities for contextual learning as possible. Workbased learning is ideally suited to this type of learning but opportunities can easily be missed.

2.4.2 Understanding of and Experience in all Aspects of an Industry

The best type of preparation for entry into careers for many secondary students is a broad understanding of careers and numerous exploratory learning experiences within career interest areas. Since the goal of secondary CTE is to open as many career opportunities as possible, such preparation must stress transferability of learning across careers and provide ease of transitioning from one career to another. Therefore, classroom and work-based learning experiences are designed to ensure that students not only develop an understanding of a career, but also the commonalities of knowledge and skills that transcend all careers.

For postsecondary students, the best preparation for entering a career is depth and thoroughness of learning. Students who are thoroughly knowledgeable and skilled in an industry will be in the best position to enter and advance in that industry. This means that postsecondary education focuses on high levels of competence and facility in application of knowledge and skills expected by high performers in that industry.

Several models for career exploration exist in Colorado. On the secondary level, work based simulation and cooperative education are employed in selected programs to provide initial exposure to career fields. On the postsecondary level, colleges and area vocational schools utilize cooperative education and internships to enhance class-based learning.

2.5 How Career and Technical Education Students Are Taught the Same Challenging Academic Proficiencies

Three conditions need to be present in order for students to develop and perform to the same high level of proficiency. First, they must have the opportunity to learn the same content as other students; it cannot be watered down. In the past, many CTE students were behind their peers in reading, writing and mathematics. The response to this often was to use instructional materials that were written at lower grade levels to increase students' chances of success and to remove learning barriers. While this did help students gain better access to career experiences, it had the unfortunate consequence of placing limited academic demands on them. Consequently, students passed through without improving their skills significantly. Today's programs recognize that students must be taken from where they are academically and raised to high performance levels. All curricular and instructional materials are designed with that in mind.

Second, high school teachers and community college instructors need to have the training and materials to ensure that students have a wide variety of learning experiences to accommodate their learning styles and needs. Many teachers, both academic and CTE, are working diligently to help students improve their academic skills, but need continuous training. Therefore, all inservice training offered at the state and regional levels incorporate methods for reaching students who lack an academic foundation for learning.

Third, the entire school community must believe that all students can learn and hold the same high level of expectation for their learning. CTE students should not be segregated for instruction in academic classes. Instructional expectations must be high, including requiring reading and writing assignments and challenging homework. Therefore, all teachers are encouraged to hold all students to the same level of rigor and appropriate levels of learning. This includes all students who are members of populations. Colorado's Committee of Practitioners for Perkins II unanimously recommended that all students should be held to the same performance standards. Our current state planning committee agreed with this position. The challenge, then, for educators is to develop the learning opportunities to help students meet high standards and expectations.

Finally, and most importantly, the process of program review conducted by System staff, with the participation of eligible recipients is the lens through which program competencies are judged. Considerable effort has been exercised by System staff, working with statewide groups of faculty and secondary instructors, to arrive at program competencies. The establishment of consistent competencies across career and technical areas also becomes the focus for technical assistance activities. More work needs to occur in this area, especially given the accent on proficiency attainment in Perkins III, but the process in place appears to be effective in ensuring that career and technical education students are taught to the same challenging standards as other students.

2.6 How the State Will Provide Local Educators Technical Assistance

CCCOES staff will provide local administrators, teachers and instructors, and members of the community at large with technical assistance in three areas: 1) administration, 2) accountability, and 3) program improvement.

Administration. State staff will assist local educators with the development of their local plans by reviewing plans in line with the state's plan and making suggestions for improvement. In depth, on-

site assistance will be provided for those secondary or postsecondary systems that are experiencing difficulties in the planning process. In addition to overseeing progress, state staff will serve as coaches on an "as needed basis" to each of the systems. This may involve sharing insights gained from other systems, identifying better ways to meet objectives, and getting educators in a region together to discuss ways that services can be delivered in more effective ways.

State fiscal staff will provide training sessions on complying with all federal laws and related requirements. These sessions are done on a regular basis at the annual meetings of the secondary systems directors and community college career deans. In addition, State staff will provide clarification on audit problems that have occurred and on how local grant recipients can avoid audit exceptions.

Accountability. A great deal of technical assistance will be provided to implement the Perkins III accountability requirements. As part of the planning process, a statewide conference was held on March 4, 1999 to orient secondary and postsecondary. systems to the accountability requirements and to explain the local plan guidelines. For the first two years, CCCOES plans to hold statewide and regional meetings to get all local practitioners up to speed on the implementation steps of the accountability system. This will include setting and refining adjusted levels of local performance for the core indicators, procedures to ensure collection of reliable and valid data, workshops on analyzing and interpreting performance data, developing strategies for program improvement based on performance data, and procedures and strategies for reporting data to the state and the general public.

Prior to passage of Perkins III, Colorado had begun a statewide project to improve procedures for accountability. Guided by a committee of practitioners, this work is intended to improve data collection procedures and to make recommendations for improving accountability at both the local level and state level.

Program Improvement. CCCOES staff will conduct a number of statewide technical assistance workshops to help local educators improve their programs. For example, the presentations at the Colorado Association of Vocational Administrator's annual conferences provide state-of-the-art knowledge on integrating academic and technical education, Tech Prep strategies, and program evaluation. Every summer an inservice is held for all systems directors, special populations coordinators, career deans and other educators on the latest developments in improving their programs. It is also a time for state and local staff to share ideas for program improvement.

2.7 How Career and Technical Education Relates to State and Regional Occupational Opportunities

In addition to new job creation, job opportunities also arise from the need to replace existing workers who leave the workforce because of retirement, health, or other reasons. In fact, replacement needs are expected to account for 61 percent of all job openings in Colorado, the remaining 39 percent from new job creation. This indicates Colorado' main industries will continue to be major sources of employment opportunities. The table below illustrates the mix of employment among Colorado industries in 1996. The aggregate data of this table are supplemented by System research tracing emerging careers and postsecondary capability in technology areas (see Appendix E for a full report). For example, the largest growth area is professional, a category which incorporates these job categories : biomedical products and devices, computer storage and peripherals, software for the telecommunications industry, and equipment for communications infrastructure. According to this research, CCCOES' colleges are poised to address these emerging occupational areas.

The table also understates the full diversity of the Colorado economy. The Front Range accounts for over two-thirds of Colorado total employment, largely influencing any statewide employment totals that are produced, and often disguising the unique economic fabrics of Colorado substate regions. Agriculture, especially, plays a larger role in the Colorado economy outside of the Front Range area. Although agriculture ranks eighth statewide of the nine major industry categories, it is among top three in the state's southernmost labor markets.

In reviewing the expected occupational opportunities that Colorado industry can be expected to produce, again it is a mix of new job creation and businesses' need to replace existing workers. In terms of growth, professional and technical occupations will add the most new jobs. These data are monitored closely as part of the program review process and through active work by System staff with Colorado's SOICC.

Table 3

Colorado Job Growth to 2006 by Category

Occupational Group	Employment Change to 2006
Professional	170,824
Services Excluding Health*	116,518
Sales	85,931
Managerial and Administrative	71,426
Clerical and Administrative Support	84,878
Hospitals-Support**	1,857
Transportation***	26,672
Construction & Extractive ***	14,038
Production & Manufacturing***	77,745
Agricultural****	9,223
Total	659,112

* Excludes hospitals and physician offices

** Includes service occupations in hospitals; professional and other career types above are not included

*** Colorado has a general occupation called Blue Collar. Transportation, Construction & Extractive are calculated by determining the "Blue Collar" jobs from each of these industries and reporting them. The production and manufacturing categories are the "Blue Collar" jobs from which are subtracted the . Transportation, Construction & Extractive industry "Blue Collar" Jobs

**** Agricultural includes only agricultural support. Colorado does not collect information on the number of farmers and farm workers.

In addition to growth areas, job opportunities will also exist among those occupations that are already prominent in the Colorado labor market. The list below shows projected annual job openings for Colorado occupations that require some postsecondary training, but less than a bachelor's degree:

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Table 4

Colorado Jobs Requiring Some Training

Occupation Type	Employment in 1996	Annual Turnover	Annual New Jobs	Annual Jobs Available through 2006
Automotive Body Repairers	3,460	107	121	228
Bakers	2,916	68	83	151
Cooks	33,411	665	883	1,548
Drafters	21,898	521	701	1,222
Drafters	4,571	91	130	221
Hair Dressers	14,647	312	671	983
Hairdressers & Hairstylists	9,754	259	145	404
Industrial Mechanics	7,023	160	157	317
Mine Machinery Mechanics	227	5	(2)	3
Mobile Heavy Equipment Mechanics	1,889	42	37	79
Laborers, Landscape/Groundskeepers	5,859	162	328	490
Secretaries, Ex Legal or Med	45,233	888	504	1,392
Licensed Practical Nurses	6,062	128	178	306
Radiologic Technicians	3,496	59	95	154
Real Estate Sales	3,602	85	103	188
Recreation Workers	3,755	166	142	308
Secretaries, Except Legal or Medical	41,478	722	362	1,084
Welding Machine Setters	114	3	3	6
Travel Agents	3,916	83	115	198
Vehicle Mechanics	3,390	75	52	127
Welders & Related	4,507	97	127	224

Table 5

Colorado Jobs Requiring Associate Degrees through 2006

Occupation Type	Employment in 1996	Annual Turnover	Annual New Jobs	Annual Jobs Available
Computer Programmers & Related	16,400	454	1,004	1,458
Dental Hygienists	2,490	75	97	172
Police & Deputies	9,049	282	259	541
Electrical & Electronic Technicians	13,912	337	349	686
Fire Fighters	3,929	150	82	232
Flight Attendants	151	4	4	8
Human Services Workers	3,481	63	316	379
Paralegal	1,510	13	90	103
Registered Nurses	25,749	355	672	1,027
Teacher Aides, Paraprofessional	14,598	193	604	797

In addition to the occupations above which require postsecondary training, many job openings exist in jobs that require only a high school education, but include moderate or long-term on-

the job training. Such occupations can present employment opportunities for students not

continuing their education past graduation. These occupations include maintenance repairers, carpenters, farmers, electricians, plumbers, correction officers, medical assistants, dental assistants and various sales positions.

2.8 Methods for Joint Planning and Coordination with Other Federal Education Programs

Job Training Partnership Act (JTPA). The Colorado Department of Labor and Employment is the agency primarily responsible for the administration of JTPA. CCCOES has administered JPTA funds received for education coordination. JTPA resources after FY2001 will be channeled into the Workforce Investment Act. Among other CCCOES staff, JTPA personnel have been active participants in assisting Colorado to make a successful transition to WIA.

School-to-Work Opportunities Act. A variety of state level activities are evolving at a rapid pace to support efforts under development with the School-to-Work Opportunities Act. Other agencies involved in planning aspects include the Colorado Commission on Higher Education, the Colorado Community College and Occupational Education System, Division of Vocational Rehabilitation, Colorado Department of Labor and Employment, Colorado Department of Corrections, Governor's office, and the Colorado Department of Commerce and Community Affairs. These agencies, along with several private sector representatives, secondary and postsecondary educators, and representatives from labor comprise a state-level Education-to-Careers (STW) Steering Committee. JTPA, and adult education has provided a foundation for these agencies to further coordinate and collaborate on developing school-to-work opportunities for youth and adults in Colorado.

Section 6 of Perkins III states that "none of the funds made available under this Act may be used to provide funding under the School-to-Work Opportunities Act of 1994 or to carry out, through

programs funded under this Act, activities that were funded under the School-to-Work Opportunities Act of 1994, unless the programs funded under this Act serve only those participants eligible to participate in the programs under this Act.

Elementary and Secondary Education Act. CCCOES staff has met with staff from the Colorado Department of Education to identify joint areas of cooperation. Staff working with Perkins, IDEA, and other federal education programs are involved in these meetings.

Coordination of Programs for Individuals with Disabilities. CDE is responsbile for adminstering part B of the Individuals with Disabilities Education Act. Colorado is forming an Employment Consortium is a group of state agencies addressing employment issues for students with disabilities. Staff from CCCOES will serve as a key member of this group, consisting of representatives from Vocational Rehabilitation, Mental Health, Human Services, Developmental Disabilities Division and the Colorado Department of Education. Additionally, CCCOES staff serve on the Governor's advisory Council for People with Disabilities subcommittee on employment that is conducting a public awareness campaign for hiring people with disabilities. CCCOES also has an interagency agreement with the Department of Vocational Rehabilitation (DVR) bring together CCCOES colleges, DVR counselors, and local employer to provide short-term training.

Apprenticeship Coordination. Individuals in apprenticeship training receive related instruction in the CTE programs offered by the state's postsecondary institutions, secondary area career-technical centers, and comprehensive high schools. CCCOES approves this instruction as a part of the local plan. Efforts have continued to expand registered and nonregistered apprenticeship opportunities. Whereas the majority of registered apprenticeship programs are individually registered (managed unilaterally), the majority of registered apprentices are participants in jointly registered programs, administered by joint labor and management committees. The Tech Prep Youth Apprenticeship and Comprehensive Apprenticeship Program are receiving primary attention utilizing state funds appropriated since 1994 for the School to Registered Apprenticeships program.

2.9 How Funds Will Be Used To Effectively Link Secondary and Postsecondary Education

Colorado has a history of articulation efforts between secondary and postsecondary education. Articulation agreements for most CTE programs have been in existence since the mid- to late-1980s. It is time to once again revisit this issue and take the articulation effort to a new plateau.

The recent interest in dual high school and college credit has spurred renewed interest in articulation efforts. Dual credit occurs when high school students participate in a college course where the high school and college have agreed to both grant credits for successfully completing the course. The concept of articulation between secondary and postsecondary entities has also expanded to address provisions of shared employer involvement, student transition support services and shared staff development.

Both local funds and state leadership funds will be used to advance articulation efforts. Dual credit efforts will be promoted by sharing "best practices" among secondary and postsecondary entities. The benefits of articulation efforts will be communicated to students, parents, counselors, instructors and administrators. Funds will also be used to support student transition services designed to enhance the retention of students once they become part of the postsecondary system. Bridge programs that especially concentrate on addressing academic deficiencies will be pursued. Both career and technical and academic course considerations will become part of articulation agreements.

These expanded articulation efforts will require technical assistance from State Board staff and renewed articulation efforts locally. Although not part of the core performance indicators system, Colorado will analyze its performance information data to determine the impact of articulation efforts which are designed to increase the number of students that transition from high school to a community college associate degree or certified program and successfully complete those degrees.

2.10 How Equity Provisions Will Be Addressed

Equitable educational systems foster the maximum development of individual potential. A commitment to equity ensures that all students develop the knowledge and skills needed to participate effectively in community life as workers, citizens, parents, leaders and role models for future generations. To assure educational excellence for all students, schools must address the diversity that students bring to the learning environment and organize schools and classrooms to support the academic achievement and success of all students.

Under Perkins II, Colorado has supported numerous equity projects and activities to eliminate sex bias and stereotyping. Some of these projects have received national attention and requests from other states who are interested in replication. The impact with these funds has been significant in balancing the gender population of students in several career and technical education programs, i.e., agriculture, health occupations, trade and industrial, technical careers, consumer and family studies, and business and marketing. The need to align the CCCOES Cornerstones and previous experience in creating meaningful results oriented gender equity initiatives is equally as timely under Perkins III for "non traditional training and employment."

System staff will provide the research, leadership, and direction to the state Perkins recipients through the basic grant awards to meet these goals. Additionally, state leadership funds will be used to target models to support goals and to provide services to schools statewide to assist with capacity building. With the ever-growing diversity in America today, it is critical that we continue to focus on providing the best free public education possible. In order to accomplish this goal of quality education for all, we are affirming the equity is essential to the reform process CCCOES will pursue these goals under Perkins III:

- Provide accessibility for both females and males to enter career and technical education programs;
- Identify the labor market demands for nontraditional training and employment trainees
- Prepare instructors to meet the needs of students that enter the nontraditional training and employment programs
- Inform students of the career possibilities in high skills and high wage occupations
- Increase the percentage of males and females in programs that lead to nontraditional training and employment

2.10.1 System Building Standards for Equity

State and local educational agencies have recently assumed more responsibility for deciding how to best improve schools. Many states have developed or are in the process of developing school improvement performance standards and assessment measures. The National alliance for Partnerships in Equity has developed this set of system-building standards to assist educational agencies and school partners in improving schools and enhancing student achievement by addressing equity issues.

System-building standards establish appropriate expectations for educational systems in the same way that content standards establish expectations for student learning. It cannot be assumed that by changing the content standards, all students will be able to meet the new standards. Consequently, the entire system of educational delivery must be examined to assure all students are able to meet the new expectations. The system-building standards that are outlined in this document address a range of variables in the educational environment (e.g.; governance, preservice and inservice education, teaching practices, evaluation, assessment, and outreach) that increase a school's capacity to foster the maximum achievement of all students. By addressing variables in the total educational environment, the system-building standards provide a concrete approach to improving schools and enhancing student achievement. These standards apply to all levels of the educational system (K-12, postsecondary and adult). When applied, these standards create educational systems that are committed to excellence for all students. While these standards address fundamental equity issues, particular attention is given to issues of gender and diversity.

The system-building standards that are outlined in this document are put forth to provide state and local leaders with direction on a range of issues related to educational equity. Each standard is accompanied by a series of indicators that can be used to focus attention on specific elements essential to meeting that standard. Where appropriate, specific content standards for student knowledge and skill development are also included. The indicators provide guidelines to consider in meeting the standard.

- Educational environments are created that honor diversity and respect the individual.
- Educational leaders assure equity in governance
- Preservice and inservice education equips faculty administrators, and staff with the skills needed to teach and work with diverse student populations and communities
- Fair and impartial teaching practices are incorporated into classrooms to facilitate the academic achievement of all students.
- Fair and impartial assessment practices are incorporated into classrooms and testing programs.
- Curricula and personnel are evaluated to ensure that issues of equity and diversity are consistently addressed.
- Data on student achievement and programs is collected and evaluated to ensure that all groups benefit from educational practices and policies.
- The entire learning curriculum is available to all students through comprehensive, individualized planning and course selection,
- Financial resources, facilities, and staffing are allocated in ways that provide opportunity and success for all students.
- Parents/caregivers, community organizations, business/industry, and schools work together as partners to promote academic achievement and inclusive learning environments.

2.11 Procedures to Develop the Memoranda of Understanding Outlined in the Workforce Investment Act of 1998

CCCOES has a long and valued history of collaboration with partner agencies and organizations that constitute Colorado's Workforce Coordinating Council. Additionally, CCCOES colleges have been active participants in local workforce development initiatives. CCCOES is and will continue to be an active participant in assisting Colorado to develop its proposal under the Workforce Investment Act. During the first year of Perkins III, all eligible recipients on both the secondary and postsecondary levels are required to submit a letter of support from one-stop service centers within their service

areas. Colorado's WIA planning proceeds at this time, but definitive working relationships have not been prescribed. However, CCCOES will work closely with the Workforce Coordinating Council and state agencies to ensure that effective and realistic collaboration occurs in developing MOU's both at the state and local levels.

During development of the WIA plan, additional procedures may be set in place regarding required memoranda of understanding between partners in local one-stop centers. The content of these agreements likely will be developed on the local level, based on local need. Individual CCCOES institutions have begun to work within the early framework provided by WIA and, accordingly, will have established the linkages necessary for effective MOU's between eligible recipients of Perkins III resources and Colorado's eighteen (18) One-Stops.

2.12 Procedures to Ensure Coordination and Nonduplication with Workforce Investment Act of 1998 Programs

CCCOES was an original partner in Colorado's first Workforce Coordinating Council, dating to its establishment in 1993. The intent has been to stem unnecessary duplication, especially in the delivery of services. Today, CCCOES continues this collaboration as the President of CCCOES currently serves as chair of the Workforce Coordinating Council. It is clear, however, that existing coordination and collaboration will have to be widened to be effective because of the wider net cast by WIA. This will be the first time that many agencies with an interest in workforce development have worked together. It is anticipated that CCCOES's prior leadership experience in this area can help to form the foundation for this broader collaboration.

As the state's delivery system for workforce development, CCCOES continually monitors itself for program duplication. CCCOES maintains a program review cycle that results in program elimination as well as consolidation of programs. About 10 percent of all programs are reviewed and closed annually. These efforts result in a mind set which promotes efficiency and quality. Thus, CCCOES is poised to both work with Colorado's 18 one-stop centers to stem unnecessary duplication of programs and to assist the Workforce Coordinating Council's effort to provide coordinated services for recipients of Individual Training Account (ITA) vouchers.

3.0 ACCOUNTABILITY AND EVALUATION

3.1 Building on Colorado's State Accountability and Performance Information Management Systems

Colorado will build upon its current statewide accountability system to meet the accountability requirements of Perkins III. CCCOES has developed and maintained the Vocational Education Accountability System (VE-135) which will be subject to limited modifications to collect the performance data required in Perkins III.

3.1.1 VE-135 Accountability System.

The current system exists as unit-record database maintained at CCCOES. This database is updated annually from two sources. The first is a diskette-based retrieval system for secondary CTE providers which is translated into the main database. Although secondary schools have the option of submitting their data via tape or over the Internet, most choose to utilize the diskette-based mode. CCCOES colleges submit data for the VE-135 through linkages with their Student Information System software

which also is maintained by CCCOES. Local district colleges submit their VE-135 data through tape while Area Vocational Schools report their data via diskette.

Information collected through the VE-135 process permits cohort analysis of CTE student attendance, retention, and graduation patterns. This information feeds into CCCOES' program approval process and is shared routinely with local programs.

3.2 Procedures to Include Input from Eligible Recipients on Core Indicators and State Adjusted Levels of Performance.

The Perkins III core indicators of performance were presented to local Perkins administrators beginning in November 1998. Comments and recommendations regarding the core indicators and State level of performance were collected and analyzed. Subsequent presentations to various groups regarding the passage and components of Perkins III also included a request for input. Data elements required in the local application were examined as a means to measure the core performance indicators throughout the previously described local application process. CCCOES staff also attended the February U.S. Department of Education Conference on Accountability and Core Performance Measurement. Colorado's proposed accountability system, related to the core indicators, were delivered both through the hearing process and in consultation with the committee of practitioners.

3.3 Core Indicators and State Adjusted Levels of Performance

Although many of the measures are common to secondary and postsecondary programs as well as other state agencies' workforce preparation programs, the core performance indicators for secondary and postsecondary are discussed separately. The core indicators and statewide levels of performance are presented in tables 6 and 7.

While Perkins III is in effect, Colorado will continue its efforts to isolate both academic and career/technical proficiencies. Although significant progress has occurred at the secondary level in Colorado to establishing statewide standards in academic areas, there exists no uniform, state-established system of career/technical proficiencies on the secondary level, nor does the postsecondary level benefit from common proficiencies across academic and career/technical areas. In several programmatic areas, however, consumer and family studies and technical, trades and industry clusters, in particular, common proficiencies have been established across most programs. These proficiencies are common only across a small proportion of Colorado's total career and technical education programs. During Perkins III, there will be an on-going effort to more fully identify academic and career/technical proficiencies and to develop methods for measuring them. What is described below, then, is based on the current capacity of CCCOES and its eligible recipients under Perkins III.

The Colorado General Assembly passed HB1313 in 1993 which directed the Colorado Department of Education to identify model standards in reading, writing, math, science, history, and geography in a first wave of activity. HB 1313 required CDE to develop model standards in art, civics, foreign languages, music, and physical education in a subsequent round. These standards do not include CTE programs. In keeping with Colorado's longstanding philosophy of local control, this legislation calls for school districts to meet these statewide standards, but leaves up to each district the details of revising curriculum, instruction, and assessment. There also is no requirement for districts to implement specific testing or assessment practices.

Under Perkins II, CCCOES established the criteria for required Standards and Measures across all career and technical programs. These criteria, accompanied by other measures such as labor market availability, enrollment projections, and other program indicators, formed the criteria for approval of CTE programs by the State Board for Community Colleges and Occupational Education. That is, each program approved by SBCCOE under Perkins II included state-established expectations for basic academic skills, applied academic skills, and occupational skills. All programs are reviewed on a five-year cycle and must evidence these competencies and report methodology for their measurement. Accordingly, all career and technical programs, throughout the CCCOES system operate with state- established proficiencies. In the absence of statewide mandatory testing utilizing a single assessment device, however, the judgement whether program graduates have met those proficiencies is made the local level. In sum, Colorado's efforts to address the new Perkins III core indicator, "student attainment of challenging, state-established academic and career and technical proficiencies," in common with most states, must rely on proximal measures for student attainment. At the same time, CCCOES acknowledges its history in this area and the considerable work which produced the framework for state-established competencies for CTE programs. This work will continue in Perkins III, especially in the areas of making CTE competencies consistent across Colorado.

Other core indicators will be measured using cohort groups of students with the intent being to follow, via summary data, students from secondary education through postsecondary education and/or employment or enlistment in the military. This information is presently collected on the VE-135 reporting process from each eligible recipient. Follow-up information also becomes part of the VE-135 system when eligible recipients submit their required follow-up data on March 15 of the year following students' program completion.

Although CCCOES will continue to refine its efforts to work with other state agencies to track students, concerns about privacy, especially emanating from secondary schools, constrain the potential for tracking completers through electronic exchange of personally-identifiable data.

Table 6

COLORADO SECONDARY CORE INDICATORS AND

FIVE-YEAR ADJUSTED LEVELS OF PERFORMANCE

Academic Proficiencies Attainment Percentage of 12th grade completers of SBCCOE-approved CTE programs meeting Colorado K-12 academic standards as evidenced by satisfying high school graduation requirements. Statewide, this rate will increase 1 percent annually, from 74.4 percent in FY2000* to 78.4 percent in FY2004.

Career & Technical Proficiencies Attainment Percentage of 12th grade students completing SBCCOE-approved CTE programs. Statewide, this rate will increase 1 percent annually, from 74.4 percent in FY2000* to 78.4 percent in FY2004.

High School Graduation Rates As determined above.

Post High School Placement Percentage of 12th grade program completers placed in postsecondary education, advanced training, military service, or employment for FY2000 through FY2004 will not fall below 96.6 percent, the average of the FY1995 through FY1997 rate.**

Participation in and Completion of Non- Percentage of students participating in nontraditional

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nontraditional programs programs in advanced training and employment that is non-traditional for their gender will increase 0.5percent annually for females, or from 6.6 percent in FY2000* to 8.6 percent in FY2004 and 0.5 percent annually for males from 14.6 percent in FY2000* to 16.6 percent in FY2004.

Percentage of 12th grade completers of selected programs leading to advanced training and employment that is non-traditional for their gender will increase 0.5 percent annually for females from 7.1 percent in FY2000* to 9.1 percent in FY2004 and 0.5 percent annually for males from 12.1 percent in FY2000* to 14.1 percent in FY2004.

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* Data benchmarks are FY1996, 1997 or 1998, the most recent year for which baseline data are available

** Figure excludes unknown graduates

Table 7

COLORADO POSTSECONDARY CORE INDICATORS

AND FIVE-YEAR ADJUSTED LEVELS OF PERFORMANCE

Academic Proficiencies Attainment Percentage of students completing SBCCOE-approved CTE programs. This rate will increase 1 percent annually, from 34.3 percent in FY2000* to 38.3 percent in FY2004.

Career & Technical Proficiencies Attainment Percentage of students completing SBCCOE-approved CTE programs. This rate will increase 1 percent annually, from 34.3 percent in FY2000* to 38.3 percent in FY2004.

The success rate of those CTE completers on national licensure and certification examinations where available.

Postsecondary Degree or Credential As determined above.

Postsecondary Program Retention, Post-Community Percentage of first-time Associate of Applied Science students

College Placement retained after one year (fall-to-fall) will increase 1.0 percent annually, or from 38.6 percent in FY2000* to 42.6 percent in FY2004.

Percentage of CTE program completers placed in advanced postsecondary education or training, military service, or employment for FY2000 through FY2004 will not fall below 93.9 percent, the average of the FY1995 through FY1997 rate.**

Participation in and Completion of Non- Percentage of students participating in nontraditional

traditional programs programs leading to advanced training and employment that is non-traditional for their gender will increase 0.5 percent annually for females, or from 7.6 percent in FY1998* to 9.6 percent in FY2004 and 0.5 percent annually for males from 9.7 percent in FY1998* to 11.7 percent in FY2004.

Percentage of students completing selected programs leading to advanced training and employment that is non-traditional for their gender will increase for females 0.5 percent annually from 8.8 percent in FY2000* to 10.8 percent in FY2004 and for males 0.5 percent annually from 8.8 percent in FY2000 to 10.8 percent in FY2004.

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* Data benchmarks are FY1997 or FY1998, the most recent year for which data are available

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** Figure excludes unknown graduates

3.3.1 Secondary School Performance Measures

3.3.1.1 *Academic Skill Proficiencies Attainment*

Legislation: Student attainment of challenging state-established academic proficiencies.

Performance Goal: To increase the percentage of CTE graduates having a foundation of academic skills.

Premise: Secondary school career and technical education students exiting high school need a solid foundation in academic skills to be prepared to benefit from further career-technical training and to succeed in their careers. Statewide assessment of academic skills in Colorado is led by the Colorado Department of Education. This assessment effort ends at the 10^{th} grade level statewide and thus standardized data are not available for secondary CTE graduates which would tie directly to this indicator. Instead, CCCOES must continue to lead the effort to integrate academic and career and technical education to ensure that all graduates have a solid academic foundation.

Method Eligible recipients will report to CCCOES the number of program completers and graduates annually.

Limitations: Currently, the only way of determining whether students have attained academic proficiency is to see if they have completed a program. By having programs aligned to the standard means that instructors will be using measurable objectives to determine student progress, thereby strengthening this proxy.

Timeline: Since the data from VE-135 system are in place, the data for determining the results for this core indicator will be available from FY2000 through the duration of Perkins III.

3.3.1.2 *Vocational and Technical Proficiencies Attainment*

Legislation: Student attainment of challenging state-established vocational and technical proficiencies.

Performance Goal: To increase the percentage of CTE students who have the career and technical proficiencies they need to pursue advanced occupational education, career-technical training, or labor-market entry, depending upon their goal after high school.

Premise: The higher the level of career and technical skill proficiency the more likely career and technical students will be better prepared to pursue further education and training and enter and succeed in high wage careers.

These proficiencies would include workplace basics (i.e., employability skills), technical skills, and the ability to apply academic skills within an occupational context. State assessments of occupational standards are not likely to be completed within the next five years. Therefore, completion of CTE courses that are aligned with state skill standards will be used as a proxy for career and technical proficiency.

Method A proxy for technical proficiencies attainment, the core indicator will be completion of a program that has been aligned with state expectations. CCCOES staff will be responsible for identifying the criteria to ensure that programs have been aligned with standards.

Limitations: Currently, the only way of determining whether students have attained technical proficiency is to see if they have completed a program. By having programs aligned to the standard means that instructors will be using measurable objectives to determine student progress, thereby strengthening this proxy.

3.3.1.3 Post High School Placement

Legislation: Placement in, retention in, and completion of, postsecondary education or advanced training; placement in military service; or placement or retention in employment.

Performance Goal: To increase the percentage of program completers who are placed in postsecondary education or training, military service, or employment.

Premise: A high school education is no longer sufficient to pursue a high skill, high wage career. Students who complete training level courses should be expected to continue on with their education or pursue advance job training. Not all students do this, however. Many enter the military or employment. Therefore, this placement measure will look at whether a CTE student is continuing education serving in the military or engaged positive in employment. Any of these outcomes will be considered a placement attainment. Postsecondary retention and completion measures will be collected only for students enrolled in postsecondary schools.

Rationale: At this time, CCCOES reports performance data on this core indicator for placement in continuing education (both secondary and postsecondary) and employment, including military service. These calculations exclude those students whose status is unknown. In FY1995 this rate was 96.2 percent, 96.6 in FY1996, and 97.0 percent in FY1997. These statewide rates are quite high and leave only very small room for improvement. Accordingly, rates from FY2000 through FY2004 will not fall below 96.6 percent, the average of the FY1995 through FY1997 rate.

Methods Data on program completers' post-high school placement is accomplished by surveys administered by each eligible recipient.

Limitations: Colorado relies on local follow-up surveys to glean information on graduates. This method permits gathering details about the effectiveness of secondary CTE programs from the graduate's perspective.

Timeline: Since the data from the VE-135 system are in place, the data for determining the results for this core indicator will be available from FY2000 through the duration of Perkins III.

3.3.1.4 Participation in and Completion of Non-traditional Programs

Legislation: Student participation in and completion of vocational and technical education programs that lead to nontraditional training and employment

Performance Goal: To increase the percentage of students participating in and completing CTE

programs that lead to training and employment that is nontraditional for their gender.

Premise: Many occupations are disproportionately represented by one gender. Women, in particular, are not well represented in many of the high skill, high wage occupations. Many of the occupations that are dominated by women often are low wage jobs. The ultimate societal equity would be for all programs to reflect the gender composition of the community. However, enrollment in high school career and technical programs often mirrors disproportionate representation. Therefore, an immediate goal is to work toward increasing enrollment of under-represented males and females in all high school programs that can lead to advanced training and employment in occupations that are non-traditional for their gender.

Methods The VE-135 identifies student participation by gender, race/ethnicity, and special-population status in all programs. This enables CCCOES to identify the programs that have representation of 25 percent or fewer of one gender. CCCOES has identified through the VE-135 system 176 secondary programs for females and 150 programs for males in which there exists a gender imbalance .

Limitations: High school CTE providers do not typically have specialized program to prepare males and females for entry into non-traditional training and employment. Therefore, an increase in the number of males or females who are under-represented in programs that are pathways to nontraditional, advanced training and employment is a measure of the programs' ability to recruit, encourage and prepare students to enter and succeed in nontraditional training and employment. Further, many occupations which are nontraditional for men also are low-wage employment, a fact which may constrain statewide progress in this area.

Timeline: Since the data from the VE-135 system are in place, the data for determining the results for this core indicator will be available from FY2000 through the duration of Perkins III.

3.3.2 Postsecondary Core Indicators of Performance

3.3.2.1 Academic Skill Proficiencies Attainment

Legislation: Student attainment of challenging state-established academic skill proficiencies

Performance Goal: To increase the percentage of postsecondary CTE graduates having a foundation of academic skills.

Premise: Postsecondary career and technical education students also require a solid foundation in academic skills to be prepared to benefit from further career-technical training and to succeed in their careers.

Comments Colorado does not prescribe a set general education curriculum for students completing Associate of Applied Science or Certificate programs. Hence, statewide consistency for this indicator must be driven by the Board's program approval process.

Method Eligible recipients will report to CCCOES the number of program completers and graduates annually.

Limitations: Currently, the only way of determining whether students have attained academic

proficiencies is to determine whether they have completed a program. By having programs aligned to the SBCCOE program approval process, instructors will be using consistent objectives to determine student progress, thereby strengthening this proxy.

Timeline: Since the data from VE-135 system are in place, the data for determining the results for this core indicator will be available from FY2000 through the duration of Perkins III.

3.3.2.2 *Vocational and Technical Proficiencies Attainment*

Legislation: Student attainment of challenging state-established vocational and technical proficiencies

Performance Goal: To increase the percentage of occupational education students who have the career and technical proficiencies needed to pursue a career.

Premise: The higher the level of career and technical skill proficiency attained, the more likely occupational students will be better prepared to pursue further education and training and enter and succeed in high wage careers. These proficiencies would include workplace basics (i.e., employability skills), technical skills, and the ability to apply academic skills within an occupational context. State assessments of occupational standards are not likely to be completed within the next five years. However, community colleges will use attainment of licensure and certification as a proxy for student attainment of career and technical competencies

Method Eligible recipients will report to CCCOES the number of program completers and graduates annually. Additionally, eligible recipients will report the pass rates on national licensure and certification examinations for applicable CTE programs.

Limitations: Currently, the only way of determining whether students have attained technical proficiency is to see if they have completed a program. By having programs aligned to the standard means that instructors will be using measurable objectives to determine student progress, thereby strengthening this proxy.

Timeline: Since the data from VE-135 system for graduation and completion are in place, the data for determining the results for this core indicator will be available from FY2000 through the duration of Perkins III. The dataset for certification and licensure also will be in place by FY2000.

3.3.2.3 *Postsecondary Degree or Credential*

Legislation: Student attainment of a secondary school diploma or its recognized equivalent, a proficiency credential in conjunction with a secondary school diploma, or a postsecondary degree or credential

Performance Goal: To increase the percentage of students attaining a postsecondary degree or credential

Premise: Credentials are important to building a resume that will help students gain access to quality educational and career opportunities. Attainment of postsecondary degrees and credentials places individuals at a decided advantage in the labor market. Also, there is a strong correlation between educational attainment and employment outcomes such as job levels and earnings.

Method: Eligible recipients will report to CCCOES the number of program completers and graduates annually.

Timeline: Since the data from VE-135 system are in place, the data for determining the results for this core indicator will be available from FY2000 through the duration of Perkins III.

3.3.2.4 *Post-Community College Program Placement and Employment Retention*

Legislation: Placement in, retention in, and completion of postsecondary education or advanced training; placement in military service; or placement or retention in employment

Performance Goal: To increase the percentage of occupational enrollees who are retained in postsecondary programs and to increase the percentage of program completers who are placed in advanced postsecondary education or training, military service, or employment and who are retained in employment.

Premise: Postsecondary retention and completion measures will be collected only for postsecondary students. In other words, it will not be a longitudinal, follow-up measure for secondary students. Getting postsecondary students to persist in their programs begins with completing the courses in which they enroll. Once these persistence rates improve, the larger task of getting them to stay and complete their programs can be advanced.

Many students enroll in occupational education programs but the percentage that completes them is small. The percentage of those students who complete the programs in a two-year period is even smaller. The first step in increasing the percentage of students completing programs is to improve retention rates in courses; this will be followed by attention to retention rates in programs.

Most certificate and degree program completers intend to enter and succeed in their chosen career fields. The key to achieving this is to find employment that is related to the their education and training, meets their career goals and interests, and provides opportunities for success and advancement. Therefore, the placement measure will look at whether postsecondary program completers are continuing education beyond the community college program, serving in the military, or engaged in employment. Any of these outcomes will be considered a positive placement.

Rationale: At this time, CCCOES reports performance data on this core indicator for placement in post-community college education and employment, including military service. These calculations exclude those students whose status is unknown. In FY1995 this rate was 93.2 percent, 93.7 in FY1996, and 94.9 percent in FY1997. These statewide rates are quite high and leave only very small room for improvement. Accordingly, rates from FY2000 through FY2004 will not fall below 96.6 percent, the average of the FY1995 through FY1997 rate.

Methods Program retention will be a measure of credits earned divided by creditsattempted.. Program completers' post-community college placement is accomplished by follow-up surveys executed at the local level.

Limitations: Follow-up surveys of graduates is a reasonably reliable way to track placement since unlike automated systems, it provides details on the nature and kinds of postsecondary occupations. On the other hand, postsecondary CTE graduates are quite mobile and this characteristic limits in

some cases the ability of local providers to survey their graduates.

Timeline: Since the data from VE-135 system are in place, the data for determining the results for this core indicator will be available from FY2000 through the duration of Perkins III.

3.3.2.5 Participation in and Completion of Nontraditional Programs

Legislation: Student participation in and completion of vocational and technical education programs that lead to nontraditional training and employment.

Performance Goal: To increase the percentage of under-represented male and female students participating in and completing occupational education and training that lead to non-traditional employment.

Premise: Many occupations are disproportionately represented by one gender. Women, in particular, are not well represented in many of the high skill, high wage occupations. Many of the occupations that are dominated by women often are low wage jobs. The ultimate societal equity would be for all programs to reflect the gender and racial composition of the community. However, enrollment in occupational programs often mirrors disproportionate representation. Therefore, an immediate goal is to work toward increasing enrollment of under-represented males and females in all postsecondary occupational programs that can lead to employment in occupations that are non-traditional for their gender. CCCOES has identified through the VE-135 system 155 postsecondary programs for females and 160 programs for males in which there exists a gender imbalance.

Methods: The VE-135 will identify postsecondary student participation by gender, race, and ethnicity, and special-population status in all non-traditional programs; that is, programs that have representation of 25 percent or fewer of one gender. CCCOES will identify specific programs that are pathways to non-traditional, advanced training and employment.

Limitations: Therefore, an increase in the number of males or females who are under-represented in programs that are pathways to nontraditional, advanced training and employment is a measure of the programs' ability to recruit, encourage and prepare students to enter and succeed in nontraditional training and employment. Further, many occupations which are nontraditional for men also are low-wage employment, a fact which may constrain statewide progress in this area.

Timeline: Since the data from VE-135 system are in place, the data for determining the results for this core indicator will be available from FY2000 through the duration of Perkins III.

3.4 Program Evaluation and Coordination

3.4.1 How the Effectiveness of Career and Technical Education Programs Will Be Evaluated

Programs are evaluated through the technology provided by the Colorado Performance Management Information System (VE-135). CCCOES designed this system to make using data for evaluation easier for state and local staff. VE-135 is a database unto itself but also draws upon several other databases to provide descriptive data on programs, program outcomes, and student outcomes. VE-135 is designed to be serve the needs of career and technical educators in Colorado by centralizing data collection, analysis, and reporting features.

Central to the effectiveness equation is continual monitoring of programs. This is accomplished by the VE-135 system and through CCCOES' process of program renewal. Upon review of performance data gathered during the five-year review cycle and maintained both by CCCOES and locally by eligible recipients, local plans will be adjusted to realign resources to address performance deficiencies in programs, schools, and or population cohorts. In this continuous improvement model, eligible recipients are competing against themselves. This means that they are trying to raise baseline performance levels toward optimal levels of performance.

At the state level, VE-135 functions as an information and accountability system, tracking student progress and program improvement strategies. Each school year, CCCOES staff will update the database that contains individual student records for grades 9 - 12 and for community college students. Staff also will disaggregate data for selected cohorts for the purposes of evaluating their progress. After preparing the data at the state level it is shared with local providers so that they can see trends within their programs.

The reports that are generated through VE-135 will allow practitioners to see what is working and what is not. VE-135 compares CTE secondary and postsecondary systems to standards that are defined with the help of local educators, administrators, student service staff members and parents. As CCCOES makes a transition to the new accountability system required under Perkins III, annual reports will be gathered from local providers and then shared back with them. This will permit the establishment of benchmarks which will guide continuous quality improvement on the state level as well as a performance reporting system for federal purposes.

3.4.2 How Federal Programs Are Being Coordinated To Ensure Nonduplication

The Office of the Governor and CCCOES mutually recognize and agree that long-term planning and coordination pursuant to the Workforce Investment Act of 1998 is under development by the governor for submission to the U.S. Department of Labor. The Carl D. Perkins Grant is an important component in this effort. The Office of the Governor and CCCOES agree that administration and disbursement of the Carl D. Perkins Grant funds shall be subject to any procedures developed and any restructuring deemed necessary to implement the planning strategy developed for the State of Colorado pursuant to WIA. Administration of the grant funds remains in the sole discretion of the Governor or his designee within the Office of the Governor.

CCCOES will continue to work with CDE, CDLE, and the Colorado's Workforce Coordinating Council to coordinate programs and activities not only under Perkins III and WIA, but for related State programs as well. Involvement in State planning and development for WIA implementation on or before July 1, 2000 will promote coordination of services and nonduplication.

3.5 How Data Related to Student Progress Will Be Reported

3.5.1 Statewide Report

The state will report its findings for the community college occupational programs and the secondary CTE systems in terms of the number and percentage of those institutions that "did not meet," "met," or "exceeded" their performance goals. The report will present for each core indicator the findings, interpretation of the data, and recommendations. The narrative on the findings will include a table similar to the sample data shell that follows:

Sample Table

SUMMARY DATA ON STATEWIDE PERFORMANCE ON THE CORE INDICATORS

(by percentage of institutions attaining the performance goal)

(Note: the data shown are fictitious and used for illustrative purposes only)

	Secondary			Postsecondary		
	Does not Meet	Meets	Exceeds	Does not Meet	Meets	Exceeds
Academic Proficiency Attainment						
Technical Proficiency Attainment						
Secondary Diploma - Postsecondary Degree Attainment						
Placement in postsecondary education or advanced training, military service, or employment				Employ-ment only	Employ-ment only	Employ-ment only
Retention in Postsecondary Education						
Completion of Postsecondary Education or Training						
Student participation in programs that lead to nontraditional training and employment						

The state performance report will also include findings on the statewide averages for each of the core indicators. The report will present for each core indicator the findings, interpretation of the data, and recommendations. The data summarized and disaggregated is shown in the following sample table.

3.5.2 Local Programs Report

The state report is aggregated from local reports. For secondary programs the report will show the percentage of high schools and AVS's that have not met, met, or exceeded the performance goal for the year. That will be followed by the findings on the percentage of students above or below the state adjusted performance levels,for each core indicator. The local report will further disaggregate the special population's performance on the core indicators by specific groups, including CTE students in alternative education.

Sample Table

Percentage of Students Attaining the State Adjusted Levels of Performance

(by percentage of students above or below the target performance level for each core indicator)

	SECONDARY					POSTSECONDARY				
	FY 2000 Performance Level	Secondary Program Completers	Special Populations Program Completers	Other Secondary CTE Students	Other Special Populations	FY 2000 Performance Level	Postsecondary Program Completers	Special Populations Program Completers	Other Postsecondary Enrollees	Other Special Populations
Academic Attainment										
Technical Attainment										
Diploma/Degree Attainment										
Placement in postsecondary/military/ employment										
Retention in postsecondary program										

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Completion of postsecondary program
Participation - Nontraditional
Completion - Nontraditional

3.6 State and Local Data Are Accurate, Complete, and Reliable

All local data submitted to CCCOES for the Colorado Performance Management Information System (VE-135) via the Colorado Student Information System (ISIS) and through a diskette-based retrieval system for secondary providers are subject to a data collection agreement between CCCOES and the local eligible recipient because the data are used not only for program improvement and accountability but also for distribution of state general revenue funds for secondary and postsecondary CTE. This agreement holds that the local entity is subject to audit. Upon an audit exception, local entities are required to return funds for over-reporting their data.

All data sources and instrumentation, data collection and reporting methods and analysis methods are designed according to the canons of science. CCCOES has the measures and methodologies reviewed by research scientists to assure they are valid and reliable measures of performance. The following table shows the sources of data for each of the core indicators and the status of the data in terms of its accuracy, completeness, and reliability.

Core Indicator	Secondary	Postsecondary
Increases in the percentage of program completers meeting academic competencies	Establishing common competencies to establish baseline for reporting	Establishing common competencies to establish baseline for reporting
Increases in the percentage of students completing programs that are aligned with career and technical competencies	Local report of students who have completed programs that have been certified by CCCOES as being aligned with the skills standards	Local report of students who have completed programs that have been certified by CCCOES for being aligned with the skills standards
Increases in CTE program completers who graduate from high school	Colorado Department of Education records matched with VE-135 records	N/A
Increases in the percentage of program completers who are placed in postsecondary education, advanced training, military service, or employment	Local reports from student follow-up surveys aggregated in the VE-135 System	Local reports from student follow-up surveys aggregated in the VE-135 System
Increases in the percentage of under-represented male and female students participating and completing in selected programs leading to advanced training and employment that is nontraditional for their gender	VE-135 enrollment in programs identified as nontraditional for either gender	VE-135 enrollment in programs identified as nontraditional for either gender

3.7 Data Collection and Reporting Processes Common to Workforce Investment Act of 1998

and Perkins Postsecondary Programs

The core data elements required under Titles I and II of the Workforce Investment Act and the Perkins Act are similar. The focus is on measuring employment entry, employment retention, skill obtainment, and transition success from the program to employment or advanced education and training.

Title I of the WIA lists separate core indicators for youth programs and for adult employment and training programs:

- Attainment of basic skills, and, as appropriate, work readiness or occupational skills
- Attainment of secondary school diplomas and their recognized equivalents; and
- Placement and retention in postsecondary education or advanced training, or placement and retention in military service, employment, or qualified apprenticeships.

The core indicators of performance for adult employment and training activities and dislocated worker programs are:

- Entry into unsubsidized employment
- Retention in unsubsidized employment six months after entry into employment
- Earnings received in unsubsidized employment six months after entry into employment, and
- Attainment of a recognized credential relating to achievement of educational skills, which may include attainment of a secondary school diploma or its recognized equivalent, or occupational skills by participants who enter unsubsidized employment, or by participants who are eligible youth age 19 through 21 who enter postsecondary education, advanced training, or unsubsidized employment..

To align the process for producing data on these core indicators with Perkins core indicators, CCCOES will work toward common collection and cycles in common within the state's WIA plan.

Indicator	Perkins III	WIA	Adult Education	Comments
Academic Skills Attainment	X	X	X	Focus on youth WIA is on basic skills
Career & Technical Skills Attainment	X	X	X	
Employment and Employment Retention	X	X	X	
12 Month Earning Gains		X		
Secondary Degree or Credential	X	X	X	
Postsecondary Degree or Credential	X	X	X	
Participation in and Completion of Nontraditional Programs	X			

Even though there exists many similarities in core indicators, a problem that will arise in Colorado is the lack of a common data tracking system. Although almost all states face this obstacle, it is clear that the multiple operating structures at one-stop centers necessitates data tools which are quite complex. Further, the delivery cycle for programs under Perkins III may not coincide with the delivery of services under WIA, mandating reporting structures which have no common time

structure. Thus, a major challenge will be to develop appropriate tools to report consistent common data.

CCCOES will work with the Colorado Department of Labor and the Workforce Coordinating Council to develop a data system which reports the results of performance objectives contained in both the state's emerging WIA plan and in this Perkins plan. The focus of this work will be on those WIA participants who receive training from CCCOES institutions, but can be extended to meet the data needs of Colorado's WIA plan.

3.8 Fiscal and Performance Audit

The Office of the Governor and CCCOES mutually agree to conduct a program audit of the Carl D. Perkins program as implemented by the Colorado Five-Year State Plan for Career and Technical Education. The program audit shall include a fiscal audit, a performance audit, or both as determined by the Governor or his designee in the Office of the Governor. The Governor or his designee in the Office of the Governor shall select the auditor or auditors. The Office of the Governor and CCCOES agree that CCCOES shall bear the cost of any audit conducted pursuant to this subsection 3.8.

4.0 SPECIAL POPULATIONS AND OTHER GROUPS

4.1 Program Strategies for Special Populations

Special populations students must have access to and successfully participate in the state's workforce preparation system. To assure that such students have the opportunity to meet or exceed state adjusted levels of performance, it is critical that strategies and services are in place to achieve success. About 28.8 percent of the total career and technical enrollment in Colorado at both the secondary and postsecondary levels have been defined as one or more categories defined by Perkins III as presented below. On the secondary level, 23.9 percent of the total enrollment meets this criteria. On the postsecondary level, 46.7 percent of total headcount are reported in one or more of these categories defined by the Act.

- Individuals with disabilities;
- Individuals from economically disadvantaged families, including foster children;
- Individuals preparing for nontraditional training and employment;
- Single parents, including single pregnant women;
- Displaced homemakers; and
- Individuals with other barriers to educational achievement, including individuals with limited English proficiency.

Proven strategies for assuring, access to and success in CTE programs for special populations begin with designing and implementing a system for tracking services provided for special populations. A prototype of this evaluation tool called AMis has been designed to collect information about services provided for single parent/displaced homemaker and pregnant and parenting teens and is currently being implemented on a small scale. During the first two years of this plan, AMis or a similar system will be instituted at both the secondary and postsecondary levels to help establish baseline data and provide data for continuous improvement.

This system will be monitored by a statewide advisory board and performance data will be reviewed annually and may eventually be integrated with data in the VE135 system. The goal is to enhance the

data collection and reporting of performance data for all CTE programs as they provide access to special populations. Performance data will be reviewed annually and maintained by CCCOES process of program renewal.

Upon annual review of the performance data, eligible recipients will adjust their local plans to realign resources and address performance deficiencies. Eligible recipients will compete against themselves. This means their objective is to provide services to special populations which include:

- Establish baseline and evaluate progress by tracking outcomes
- Outreach and recruitment
- Identification
- Assessment of how needs of special populations are being met
- Supplemental services
- Career awareness, guidance and counseling including exposure to nontraditional career options
- Counseling and transition
- Coordination and collaboration
- Systemic staff development
- Monitoring and evaluation
- Job readiness skills including preparation for non-traditional fields
-

Advocacy for the various special populations continues to be critical in assuring that students' needs are met. The following activities expand upon the strategies outlined above.

- Providing transition service for special populations
- Promoting outreach and recruitment information regarding career opportunities with emphasis on non-traditional opportunities.
- Promoting the analysis of performance data to determine areas of needed outreach and recruitment.
- Identifying special population students by their condition.
- Assessing, or coordinating the assessment of, special populations students enrolled in CTE programs to determine and address their special needs.
- Planning and coordinating supplementary services for special populations in CTE programs.
- Facilitating the identification of appropriate adaptive equipment, assistive devices and new technology for students with disabilities.
- Providing inservice activities for career and technical educators, developmental staff, counselors and administrators which aid in addressing special populations.
- Collaborating with instructors of CTE programs to ensure the success of special populations students in these programs.
- Providing inservice activities for instructional assistants/paraprofessionals, mentors, tutors, and other appropriate support personnel.
- Identifying and/or developing special instructional materials or adapting, existing instructional materials for career and technical programs.
- Facilitating cooperation among career and technical educators, developmental staff, counselors and administrators pertaining to the needs of individual students in CTE programs.
- Collaborating with other agencies providing support services to special populations students.
- Coordinating special placement and/or transition services for special populations students
- Providing help for single parents in addressing child care issues, transportation and special scheduling (where applicable).

To be successful in meeting the needs of special populations, the above strategies must be known and utilized by special populations students, instructors in CTE programs, career guidance counselors, and administrators. Improved performance by local recipients will be highly dependent upon meeting the service needs of these students.

4.2 How Special Populations Will Be Provided Equal Access to Perkins III Activities

Individuals who are members of special populations will be provided with equal access to the full range of CTE programs available to individuals who are not members of special populations, including occupationally specific courses of study, cooperative education, apprenticeship programs, tech prep and comprehensive career guidance and counseling services and will not be discriminated against on the basis of their status as members of special populations. Equal access to CTE programs can be exhibited through these pathways.

- CTE program enrollment has approximately the same make-up, by ethnic background, disadvantaged status, disability and gender as enrollment of the total student body.
- Members of special populations have equal access to programs that are over-enrolled. Where the number of students requesting a specific program is greater than the program can serve, the class enrollment figures and the waiting list should show approximately the same proportions of members of special populations.
- Entry requirements do not adversely affect access for members of special populations to CTE programs.
- Special populations students are enrolled in all types of education programs including occupational specific courses, cooperative education, internships, apprenticeships and Tech Prep programs.

Outreach and recruitment activities are a critical component of local program delivery. Special emphasis is placed on outreach and recruitment of special populations students into CTE programs to assure that enrollment into these programs approximately matches the population of the eligible recipient by ethnic background, disadvantagement, disability, gender, single parent/displaced homemaker and pregnant/parenting women (where applicable). Before appropriate outreach and recruitment activities can occur, eligible recipients must analyze baseline data to determine the appropriate distribution of special populations among the programs being provided. For example, if a large limited English proficient population exists in the community, but few are represented in CTE programs, outreach and recruitment is a priority activity for this eligible recipient. The ideal recruitment strategy finds instructors, counselors and administrators involved in a collaborative effort to determine what barriers exist to the enrollment of special populations and how to break down those barriers.

4.3 How Special Populations Will Not Be Discriminated Against

CTE programs and activities for individuals with disabilities will be provided in the least restrictive environment in accordance with Section 612(a)(5) of the IDEA and will, if appropriate, be included as a component of the individualized education program developed under Section 614(d) of that Act. Students with disabilities who have individualized education programs developed under Section 614 (a) of the IDEA, with respect to CTE programs, will be afforded the rights and protections guaranteed those students under that Act. Efforts to meet requirements are coordinated so services are complementary and provide the complete continuum of both programs and support activities to

enable special populations students to be successful in CTE programs.

CCCOES conducts Civil Rights on-site visits as per the federal court order affecting CTE programs to assure the nondiscrimination rights of various special populations groups are not violated. The assurance of nondiscrimination will also be required of eligible subrecipients through the development and submission of their local plan.

Technical assistance and professional development activities are also provided by State staff and through leadership development activities in the area of nondiscrimination.

4.4 How Special Populations Will be Provided Programs Designed to Enable Them to Meet or Exceed State Adjusted Levels of -Performance and to Pursue Further Learning and High Wage Careers

Local plan guidelines require that eligible recipients specify the strategies and services available to meet the needs of each of the special populations in career and technical education programs. Eligible recipients will ensure that strategies and services for members of special populations in career and technical education programs are appropriate. These services may include supplementary services, guidance and counseling, and transition services. The needs of individual students in programs will be identified and addressed. Supplementary services may include

- Special Populations Coordinator
- Tutoring,
- Note-taking
- Instructional aides/assistants
- Special instruction materials
- Remedial/developmental instruction
- Special or adaptive equipment and devices
- Career and Technical fees and supplies
- Career and Technical English as a Second Language
- English as a Second Language
- Job seeking skills
- Child care
- Transportation
- Social service referrals
- Pre-vocational skills training
- Interpreting
- Mentoring
- Support groups
- Placement services

4.5 How Needs of Students in Alternative Education Programs Are Addressed

4.5.1 Background and Rationale

To effectively serve the needs of students who, for a variety of reasons, are at-risk of school failure, local school districts, regional offices of education, and consortiums of providers including community colleges, community-based organizations, non-profit providers of instructional services or educational enhancements, municipal entities, and charter schools are providing innovative

instructional programs and comprehensive services. Students attending, these programs either remain the responsibility of the local school district or are administratively transferred to a program. Students receive instruction according to an individualized education plan. While many students complete their education program in an alternative setting, most programs expect the student will return to his/her home school district. In the case of adjudicated youth, students move from the jurisdiction of the juvenile court to their district of residence. In addition, to increase the number of students that complete high school and successfully transition to postsecondary education and/or employment, several regional superintendents operate alternative high schools that meet the requirements for high school graduation for districts within the region. Under state law, students enrolled in these programs are eligible to receive state aid generated by Colorado's formulae for Per Pupil Operating Revenue as administered by the Colorado Department of Education.

Colorado recognizes the need for a broad array of quality educational programs for life-long learners and for students who have not been successful within the regular school program. Often, in an instructional setting more appropriate to their needs, these students become highly successful at school and in the workplace. As the number and scope of these alternative learning environments increase, more students will spend some portion of their academic careers outside of the traditional educational delivery system. While alternative education programs often work to return the student to the educational mainstream including the home school, where appropriate, many students will derive substantial educational benefits from the alternative school program and will therefore spend a significant portion of their educational careers in the alternative setting. Given this context, the state's role in the implementation of Perkins III is to help ensure that students in alternative learning environments are not denied access to CTE. The state has developed a six-point strategy to address this concern.

- Technical Assistance and Outreach. The state will provide technical assistance to appropriate providers to increase the awareness of secondary directors, career deans and area center directors regarding the needs and resources of alternative learners including those at-risk of school failure. The goal is to provide technical assistance that facilitates the inclusion of alternative learners into CTE offerings. In addition, the state will extend its existing outreach efforts referenced in section 4.2 of the plan to alternative learning programs. This includes recruiting directors, teachers and administrators to participate in the Connections conference and in other planned technical assistance meetings as appropriate. In addition, the state will convene meetings with alternative providers and local community residents to increase stakeholder participation in the development and implementation of approved CTE programs at the local level.
- Inclusion of alternative learners as part of Local Plan Requirements. In addition to requiring that eligible recipients specify the strategies and services available to meet the needs of each of the special populations enrolled in CTE programs, local plan guidelines also specifically ask how alternative learners will access career and technical education programs. While local providers will determine how to serve this population, the local plan guidelines seek to maintain a balance between local flexibility and appropriate student access to CTE programs.
- Integrate program performance data for programs, serving at-risk students with the VE-135 System. The goal is to enhance the data collection and reporting of performance data for all programs providing CTE to alternative learners.
- Provide on-going professional development for teachers in alternative environments to increase their knowledge about models that work with at-risk students. State staff can provide teachers working in alternative learning environments with information about research-based program models that work with at-risk youth. The goal of this activity is to increase student access to

CTE by enhancing, where appropriate, the development of approved vocational programs and Perkins participation as determined by local providers.

- Provide on-going professional development for teachers in alternative learning environments to infuse existing curriculum with models of entrepreneurship education. To provide employment and other options consistent with the rapidly changing global economy, students in CTE programs need to have basic skills necessary to own and operate their own businesses. Entrepreneurship engages students by teaching applied academic, occupational and workplace skills that operate in the real world within the school setting.

4.6 How Funds Will Be Used to Promote Preparation for Nontraditional Training and Employment

All students should be encouraged to explore career options based on their abilities and interests, and to explore the full range of careers including occupations that are nontraditional for their gender. Occupational segregation continues to be one of the most significant factors in the persistent wage gap between women and men. For example, women comprise 79 percent of administrative support workers and only 2 percent of workers in construction trades. To promote preparation for nontraditional training and employment, the state will use $60,000 of equity carryover funds to support statewide contracted technical assistance services, training and resources to local providers. Planned activities include:

- Providing inservice training for educators, administrators, counselors, parents, and employers,
- Providing resource materials,
- Developing curriculum,
- Reviewing curriculum and instructional materials to ensure that they are inclusive, represent diversity and are gender fair,
- Promoting an equitable school climate,
- Encouraging and supporting nontraditional career choices including careers in computer science, technology and other emerging high skills occupations,
- Sharing strategies for recruitment into nontraditional programs,
- Providing recruitment materials that emphasize information about the types of jobs in which nontraditional training will result and the salary range for entry-level and experienced workers,
- Sharing strategies for support and retention of nontraditional students,
- Preventing sexual harassment and sex discrimination in the classroom.

4.7 How Funds Will Be Used to Service Individuals in State Correctional Institutions

Youth Services. The Colorado Department of Corrections, Division of Youth Services (DYS), historically has participated in Carl Perkins plans administered by CCCOES. The Division of Youth Services continues to request resources for classroom instruction and transition services and to continue to implement a distance learning classroom at Grant Mesa Youth Services Center in Grand Junction. This classroom would be linked to other secondary classrooms throughout the Western Slope. Additionally, Perkins funding also has provided two (2) transition specialists to work with youth in the Denver area. Over fifty (50) individuals have received these services, resulting in 40 placements in jobs, training, programs, community colleges, and postsecondary technical schools. In the southern region, the Division of Youth Services operates at the Zeb Pike Youth Services Center. This program has articulated with local community-based organizations to offer a continuum for janitorial and maintenance jobs in the larger community.

Ex-Offenders Education. The Colorado Department of Corrections in partnership with the Community College of Denver has created a transitions program that will provide ex-offenders with guidance and advising related to skills training. The manager for this effort will be housed at the Community College of Denver and direct ex-offenders/students to appropriate education and training programs at local community colleges as well as other resources and service provided by other community-based providers. The program also requires a minimum three-month follow-up of both employee an employer. In addition to case management, life skills instruction, and career-oriented advising, the coordinator will assist with external liaisons for each participant. Additionally, an employment specialist will facilitate and direct participants to appropriate employment opportunities. This program has served over 200 ex-offenders with intake assessment. Of these 150 have received job development and placement assistance. Ultimately, this program results in job placement and retention success for more than 65 percent of the ex-offenders who receive job placement and follow-up assistance.

Professional Development Opportunities. There exists a need to provide development activities for more than fifty (50) correctional vocational educators to attend state inservices and conferences. Specific skills to be enhanced include: teaching standards and competency-based systems, applying SCANS skills, application of workplace literacy skills in the career and technical curriculum, and coordination of employment placement activities.

5.0 TECH PREP

5.1 Program Requirements

5. 1. 1 How Tech Prep Programs Will Be Carried Out Under an Articulation Agreement

Secondary and post-secondary educators cooperatively enter into articulation agreements of specific curricula to ensure student progression through a non-duplicative sequence of courses leading to an associate or baccalaureate degree, two-year certificate in a specific career field, or a two-year apprenticeship leading to placement in a technical occupation. The components of an articulation agreement include secondary courses and/or competencies, post-secondary courses, grades or levels of performance necessary for the student to obtain credit hours at the postsecondary level.

5.1.2 Tech Prep Program Structure and Common Core of Proficiencies

Academic and technical instructors work together to create a common core of required proficiencies in math, science, reading, writing, communications and technologies. Instructors work together on integration techniques to strengthen the relationship between theory and application. Tech Prep program of study is at least two years of secondary education preceding graduation and 2 years or more of higher education and/or apprenticeship.

5.1.3 How Tech Prep Meets State Academic Standards, Links Secondary and Postsecondary Institutions, Incorporates Work-Based Learning, and Uses Educational Technology and Distance Learning

Tech Prep is a competitive process. Consortia apply through an established Request for Proposal Process (See Appendix G) which address academic content standards that integrate workplace competencies. Colorado has required workplace learning in Tech Prep consortia since 1994. All Tech

Prep programs need to further identify technical skills and the integration of academic standards within workplace competencies. This foundation was stressed at the Tech Prep Bidder's Conference held February 1999 and at Perkins Local Application Inservices held statewide this Spring. All statewide Tech Prep initiatives in agriculture, med-prep, early childhood professions, food service, and cosmetology have developed crosswalks between workplace competencies and state content standards.

As secondary and postsecondary instructors develop their Tech Prep programs of study, curriculum identifies technical skills, integrates workplace competencies and cross-references Colorado's Academic Content Standards. Consortia identify a sequence of courses from secondary to postsecondary education which becomes the Tech Prep program of study. Work-based learning may take many forms including work-site learning, but must be an integral part of any Tech Prep program. Tech Prep consortia have many demographic challenges, some which require the use of distance learning in order to offer courses to more students and eliminate some of the financial burden.

Articulation and transfer are a priority and initiative of the Colorado Community College and Occupational Education System. Linking institutions vertically through articulation agreements is required. The most recent Request for Proposal (Appendix G) requests articulation agreements as part of the grant application. Linking institutions horizontally is accomplished through publications such as the Tech Prep newsletter and two meetings each year of the Tech Prep Coordinating Council. Colorado's Tech Prep experiences also are shared at the annual International Integration Conference in Beaver Creek.

Tech Prep consortia utilize educational technology to the fullest by sharing common facilities so all students can benefit from state of the art technology. CCCOES, through its Education Technology Training Center and expertise amassed through forming CCCOnline, has assisted existing Tech Prep programs. One of the best examples of distance learning via telecommunications is in the industrial technology consortium beginning on the Eastern Slope incorporating six community colleges and many rural high schools. Students may also access distance education technologies provided through CCCOES as they effect the second half of their Tech Prep experience at CCCOES community colleges.

5.1.4 Tech Prep Inservice Training for Teachers

CCCOES provides inservice training statewide for secondary and postsecondary instructors and administrators including Tech Prep coordinators. Besides other workshops, meetings and presentations, a Tech Prep Coordinating Council meets twice a year. Topics at this and other inservices and meetings include

- Transition of Tech Prep students from secondary to postsecondary education;
- Provide for career guidance and development for Tech Prep students;
- Assist consortia in measuring outcomes of student enrollment, program completion, transfer of students, academic achievement and employment placement;
- Identify and accurately report Tech Prep students;
- Use evaluation results to improve Tech Prep programs;
- Increase the number of secondary and postsecondary instructors who are integrating academic and CTE content and using contextual methods of teaching;
- Assist in integrating workplace competencies with Colorado Academic Content Standards;
- Assist teachers to implement Tech Prep technical standards in CTE programs;

- Assist teachers and administrators in staying current with the needs and expectations of business and all aspects of the industry.

In addition, CCCOES will facilitate joint training of teachers from secondary and postsecondary education on integration and contextual learning and training in the use and application of technology. A Tech Prep newsletter is distributed three times a year which features best practices of Tech Prep education. This newsletter and other Tech Prep information can also be found on CCCOES website. Teachers are also offered opportunities for externships to visit another Tech Prep program or industry.

5.1.5 Tech Prep Training for Counselors

CCCOES provides inservice training on a regional and statewide basis for secondary and postsecondary counselors. In addition, the CCCOES Guidance Counselor's Advisory Committee is available to assist counselors in staying current with the needs, expectations and methods of business and all aspects of the industry. State and local workshops assist counselors in more effectively providing information to students regarding Tech Prep programs, supporting student progress in completing Tech Prep programs, providing information on related employment and placing students in appropriate employment. Counselors are also given information to help them stay current with the needs, expectations and methods used in business and all aspects of the industry.

5.1.6 How Tech Prep Programs Provide Equal Access to Special Populations

All Tech Prep consortia are required to provide equal access to programs to individuals who are members of special populations. This includes the development of Tech Prep education program services appropriate to the needs of these individuals so they have an opportunity to enter Tech Prep education that is equal to that afforded the general student population.

Access for all students is part of the Tech Prep application process. Also, school districts, local consortia, and community colleges must address provisions for equal access in the Perkins local applications. All consortia will be reviewed for compliance with equal access by the System's Non-Traditional Employment Coordinator.

5.1.7 How Tech Prep Programs Provide Preparatory Services for Students

In absence of precise definitions for preparatory services, Colorado has defined them to include career exploration activities, career and academic planning processes with assessment of student career interests, and remedial/tutorial work for students who need additional assistance to be successful in their Tech Prep programs. Aurora Public Schools has developed a mentor program for CTE students to assist middle school students to develop their career interests. The System Tech Prep Coordinator will continue to monitor each eligible recipient to ensure that appropriate and reasonable preparatory services are provided.

5.2 Administrative Requirements

5.2.1 Formula and Competitive Basis for Awarding Grants to Tech Prep Consortia

Tech Prep funds are allocated to consortia based on a competitive process. Consortia prepare proposals addressing federal and state purposes. Consortia describe a 2+2 sequential course of study

and articulation, academic integration, work-based learning, technical preparation, academic proficiencies, degrees or certificates, employment placement or further education and performance indicators. They also address CCCOES' Cornerstones set by SBCCOE. The Cornerstones are accessibility of programs, community connectedness, learner/learning-centered focus and market alignment. Dollars are allocated to consortia through this competitive process and recommendations are made to the Board for disposition.

5.2.2 How Special Consideration Is Given to Applications Addressing Sec. 205 (d)

The RFP point system for evaluation contains points for the narrative section; objectives, methods, outcomes and timelines; evaluation plan; and budget and budget narrative. This totals 100 points possible. Ten additional points are given for special considerations addressing employment placement, business/industry, labor and higher education involvement, drop-out prevention, training in areas of workforce shortages and demonstration of students meeting high academic and employability competencies. Each application received will be reviewed to determine if the special considerations, objectives and timelines outlined in application will allow consortia to meet the required Tech Prep elements. Additionally, each application will be negotiated and revised as needed to ensure the elements are addressed. Each application received is reviewed by a team of members from the State Tech Prep Advisory Committee, the Executive staff of CCCOES, and approved by the SBCCOE program and planning committee with final approval from the Board.

5.2.3 How Equitable Distribution of Assistance is Ensured

Tech Prep consortia represent a balance of rural and urban populations. Rural and urban areas are balanced in FY2000 consortia and are presently awaiting approval by the Board. Ultimately, the Board reviews this ratio and ensures that balance is achieved.

5.2.4 How Tech Prep Programs Will Be Evaluated Using the Core Indicators and How Data Will Be Collected To Address the Reporting Requirements

Tech Prep students are flagged in the VE-135 System. State and local performance reports will contain a separate section on the performance of Tech Prep students on the core indicators. Some consortia have joined the Colorado State University Evaluation study which focuses on a random sampling of Tech Prep and non-Tech Prep students to determine their satisfaction with their experiences. Effort has been made under Perkins II also to ensure that secondary providers correctly identify Tech Prep participants so that accurate follow-up information can be extracted from the VE-135 System. This will ensure comparative analysis of the academic attainment of Tech Prep and non-Tech Prep secondary graduates. FY 2001 grants for continuation will be reviewed according to consortia meeting or exceeding expected outcomes identified on FY2000 proposals. Beginning with FY2000 Consortia must track entry and subsequent performance of their secondary completers through postsecondary education and report on these data to System staff annually.

Tech Prep consortia are also reviewed on a rotating basis for gender balance. CCCOES has identified through the VE-135 system 176 secondary programs for females and 150 programs for males in which there exists a gender imbalance through the Tech Prep Technical Assistance and Review Process.

6.0 FINANCIAL REQUIREMENTS

6.1 Assurances

6. 1. 1 Compliance with Requirements of Title I and the Provisions of the State Plan Including a Financial Audit

CCCOES will comply with the applicable requirements of Titles 1, 11, and III of the Act. CCCOES will maintain financial records associated with the expenditure and disbursement of all funds associated with the Act per the state accounting system, which utilizes a modified cash basis. Expenditures for personnel and travel are charged to the fiscal period in which these occur. Supplies, equipment and printing are charged to the fiscal period in which they are obligated. Contractual services are charged to the fiscal period in which service is rendered. All fiscal procedures shall be according to state and federal regulations for state agencies.. All obligations must be liquidated by September 30 following June 30, the close of each fiscal year, except those funds obligated prior to June 30 to be expended in the immediate subsequent fiscal year. The accounting systems utilized by local educational agencies vary from a strictly cash basis to a strictly accrual basis.

Copies of all records of financial accounts and supporting documents will be kept on file in the office of CCCOES, Denver, Colorado, until audit completion by federal auditors or for a period of five years unless an audit is in progress. Recipients of federal or state CTE funds shall retain basic fiscal documents for the same period.

The state auditor is responsible for an independent audit of all State Board for Community College and Occupational Education operations involving the use of state or Federal funds. Such audits are made at least annually and will be conducted in accordance with the generally accepted auditing standards, " Government Auditing Standards," issued by the Comptroller General of the United States, and OMB Circular A-133, "Audits of Institutions of Higher Education and Other Nonprofit Organizations"(the Single Audit Act of 1990). Copies of such audits will be available in the office of CCCOES, Denver, Colorado, and/or the office of the State Auditor, State of Colorado.

CCCOES maintains financial management systems, which comply with the financial reporting requirements of 34 CFR Part 80.20, (b)(1) and (2) and 34 CFR Part 74.1-74.73, fiscal control and fund accounting procedures. CCCOES staff and/or a certified public accountant licensed to practice in Colorado will audit the fiscal records and documents of the local educational agencies pertaining to expenditures claimed for federal financial participation under an approved program. Audits will be made annually in accordance with the Single Audit Act of 1990 and state requirements. Copies of such audits will be available from the LEA or CCCOES, Denver, Colorado, depending on the audit requirements.

6.1.2 Funds Not to Be Used to Acquire Equipment

None of the funds expended under the Act will be used to acquire equipment (including computer software) in any instance in which that acquisition results in a direct financial benefit to any organization representing the interests of the purchasing entity or its employees or any affiliate of such an organization.

6.2 Required Descriptions

6.2.1 Method and Rationale for How Funds Will Be Allocated Under Section 111

The rationale for the secondary/postsecondary split rests on three factors. First, Colorado secondary schools receive an additional $16 million in general fund support to support the Colorado Vocational Act. These resources in combination with Perkins basic grants, bring the total external support for secondary career and technical education to approximately $20 million, compared to the $10 million dollars which postseondary providers derive from Perkins basic grants. Second, the Per Pupil Operating Revenues allocated to public schools in Colorado average $4,226 compared to an average Full-Time Equivalent Student reimbursement to community colleges of $3,041. Third, the enrollment patterns of secondary career and technical education students are less likely to be full-time. Secondary career and technical students typically are enrolled in one or two career and technical classes which comprise only part of their total program of study. Students enrolled in postsecondary programs, in contrast, are more likely to attend on a full-time basis, or to pursue just classes in career and technical education programs.

CCCOES will distribute 85 percent (85%) of Title I funds to local eligible agencies consisting of 15 community colleges, 4 Area Vocational Schools, and 41 secondary schools and 19 secondary consortia. Sixty percent (60 %) of these funds are distributed to the postsecondary entities and 40 percent to secondary entities.

As reviewed above the data and supporting rationale result in a funding split of 60 percent secondary and 40 percent postsecondary. The Leadership set-aside (10%) of the State's allocation is not divided between secondary and postsecondary. These funds are designed to provide leadership activities and support that are equally available and applicable to both educational levels. Institutions of higher education are often involved with providing such leadership activities. In Colorado, the 15 community colleges, 4 area vocational schools and 41 secondary schools and 18 consortia constitute eligible recipients.

6.3 Other Financial Information

6.3.1 FY 2000 Perkins III Budget

Table 8
FY2000 Budget
(based on FY1999 federal allocation, actual amount will vary on receipt of FY2000 allocation)

Title I Assistance to States	$ 13,399,568.00
Local Formula Distribution (75 %)	$10,250,670
Postsecondary Programs (60%)	$6,150,402
Secondary Programs (40%)	$4,100,268
Reserve Fund (10%)	$1,138,963
Postsecondary Programs (40%)	$455,585
Secondary Programs (60%)	$683,378
• State Leadership (10%)	$1,339,957
a. State Correctional Institutions	$60,000
b. State Leadership Activities Required Uses of Funds	$1,097,061

c. Professional Development Programs	$62,000
• State Administration (5 %)	
Perkins, Funds	$669,978
State Matching, Funds	$669,978
Title I Total	$13,399,568
Title II Tech Prep Education Programs (Title II)	$1,421,257
Title II Total	$1,421,257
Total State Allocation	$ 14,820,825

CCCOES will expand allowable costs for VSO activities to include assessments for student leadership and skills development through career development events and competitive events. These costs will cover both national and state leadership and competitive conferences for VSO students, advisors, and teachers.

6.3.2 Distribution of Title I, Part C, Local Formula Funds

A 60/40 percent split in Title I, Part C, funds $683,378 will provide the state's secondary schools and consortia (40%) and community colleges and area vocational schools (60%) with funding throughout this plan. Additionally, Colorado will utilize the reserve option, using ten percent (10%) of the basic grant allocation to target resources to rural recipients.

6.3.3 Formula Distribution Description

The only portions of the state allocation distributed by formula are the secondary and postsecondary setaside or 85 percent of the total state allocation. Of this amount, 10 percent shall constitute a reserve fund. The remaining 75 percent is allocated to secondary schools and consortia (40%) and postsecondary institutions (60%). Formula allocation factors are dictated by the Act. The Perkins II formula factors used for postsecondary eligible recipients shall be identical to the formula used for Perkins III allocations. For secondary schools and consortia the Perkins II formula factors shall be used for the first year of this plan, FY 2000 (July 1, 1999 to June 30, 2000).

- Seventy percent shall be allocated based on the number of students enrolled in Title I programs.
- Twenty percent shall be allocated based on students with handicapping conditions (IDEA Act).
- Ten percent shall be allocated based on the number of students enrolled in schools (K-12)

For FY 2001 through FY 2004, secondary schools allocations will be determined on the new formula factors specified by the Act.

- Seventy percent shall be allocated based on the number of students aged 15 to 19 from families with incomes below the poverty line enrolled during the preceding fiscal year. Colorado will determine this amount based on the number of students receiving free or reduced lunches during the preceding academic year as reported by the Colorado Department of Education.

- Thirty percent shall be allocated in proportion to the number of individuals aged 15 to 19 enrolled during the preceding fiscal year. This count will be determined by grade 9 through 12

enrollments as reported by the Colorado Department of Education.

For postsecondary institutions:

- Ninety percent of the postsecondary share shall be allocated on the number of individuals who are Federal Pell Grant recipients enrolled in such institution in the preceding fiscal year. The remaining ten (10) percent shall be allocated on a waiver basis as indicated below.
-
- A waiver to this allocation formula for postsecondary is sought on behalf of Emily Griffith Opportunity School, a state-funded Area Vocational School which does not participate in federal financial aid programs authorized under the Higher Education Act of 1998. CCCOES previously has applied for this waiver under Perkins II; this notice is intended to continue that waiver. The allocation to Emily Griffith Opportunity School is determined by the number of students who receive financial assistance from the Colorado Department of Human Services. See Appendix H for a copy of the waiver previously approved by OVAE for Emily Griffith Opportunity School.
-

CCCOES also will create a ten (10) percent reserve fund from the basic grant allocation. This reserve fund will be used to distribute resources to eligible recipients based on two factors, rural location and high percentages of career and technical students. Postsecondary recipients annually will receive forty (40) percent of the reserve fund and secondary recipients will receive the remainder, sixty (60) percent. All rural eligible recipients will receive half of the reserve fund allocation based solely on their location and the available reserve fund dollars allocated between secondary and postsecondary providers. The second half of the reserve fund is allocated to eligible recipients based on whether their percentage of career and technical students as a proportion of total enrollment places them in the top quartile for their sector and the available reserve fund dollars allocated between secondary and postsecondary providers.

Total FY 2000 within state allocations for postsecondary and secondary providers may be found in Appendix I.

DEFINITIONS

Administration - The term 'administration', when used with respect to an eligible agency or

eligible recipient, means activities necessary for the proper and efficient performance of the

eligible agency or eligible recipient s duties under this Act including supervision but does not include curriculum development activities, personnel development, or research activities.

All Aspects of an Industry - The term 'all aspects of an industry' means strong experience in, and comprehensive understanding of, the industry that the individual is preparing to enter.

Alternative Learning - There are several definitions of alternative learning that apply. 1. Alternative learning environments are instructional programs operated by entities other than local school boards, or community college districts; 2. Alternative learning environments often refers to innovative programs operated by school districts and/or local community college districts targeted to the needs and learning styles of learners at risk of not meeting state or district performance standards; 3.

Alternative learning may also refer to innovative instructional programs operated by a consortium of educational entities, business, or partnerships involving private educational entities, social services, community-based organizations, etc. The consortia provide comprehensive services to a targeted population.

Area Vocational and Technical Education School - The term 'area vocational and technical education school' means (a) a specialized public secondary school used exclusively or principally for the provision of vocational and technical education to individuals who are available for study in preparation for entering the labor market; (b) the department of a public secondary school exclusively or principally used *for providing vocational and technical education in not fewer than five different occupational fields to individuals who are available for study in preparation for entering the labor market; (c) a public or nonprofit technical institution or vocational and technical education school used exclusively or principally for the provision of vocational and technical education to individuals who have completed or left secondary school and who are available for study in preparation for entering the labor market, if the institution or school admits as regular students both individuals who have completed secondary school and individuals who have left secondary school; or (d) the department or division of an institution of higher education, that operates under the policies of the eligible agency and that provides vocational and technical education in not fewer than five different occupational fields leading to immediate employment but not necessarily leading to a baccalaureate degree, if the department or division admits as regular students both individuals who have completed secondary school and individuals who have left secondary school.

Career Guidance and Academic Counseling - The term 'career guidance and academic counseling' means providing access to information regarding career awareness and planning with respect to an individual's occupational and academic future that shall involve, guidance and counseling with respect to career options, financial aid, and postsecondary options.

Career and Technical Education- The term 'career and technical education' means organized educational activities that (a) offer a sequence of courses that provides individuals with the academic and technical knowledge and skills the individuals need to prepare for further education and for careers (other than careers requiring a baccalaureate, master's, or doctoral degree) in current or emerging employment sectors; and (b) include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, of an individual.

Charter School - The term 'charter school' has the meaning given the term in section 10306 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 8066).

Cooperative Education - The term 'cooperative education' means a method of instruction of education for individuals who, through written cooperative arrangements between a school and employers, receive instruction, including required academic courses and related vocational and technical education instruction, by alternation of study in school with a job in any occupational field, which alternation shall be planned and supervised by the school and employer so that each contributes to the education and employability of the individual, and may include an arrangement in which work periods and school attendance may be on alternate half days, full days, weeks or other periods of time in fulfilling the cooperative program.

Displaced Homemaker - The term 'displaced homemaker' means an individual who (al) has worked primarily without remuneration to care for a home and family and for that reason has diminished

marketable skills; (a2) is a parent whose youngest dependent child will become ineligible to receive assistance under part A of title IV of the Social Security Act (42 U.S.C. 601 et seq.) not later than two years after the date on which the parent applies for assistance under this title; and (b) is unemployed or underemployed and is experiencing difficulty in obtaining or upgrading employment.

Educational Service Agency - The term 'educational service agency has the meaning given the term in section 14101 of the Elementary and Secondary Education Act of 1965.

Eligible Agency - The term 'eligible agency' means a state board designated or created consistent with state law as the sole state agency responsible for the administration of vocational and technical education or for supervision of the administration of vocational and technical education in the state.

Eligible Institution - The term ,eligible institution' means (a) an institution of higher education; (b) a local educational agency providing education at the postsecondary level; (c) an area vocational and technical education school providing education at the postsecondary level; (d) a postsecondary educational institution controlled by the Bureau of Indian Affairs or operated by or on behalf of any Indian tribe that is eligible to contract with the Secretary of Interior for the administration of programs under the Indian Self-Determination Act or the Act of April 16, 1934 (48 Stat. 596; 25 U.S.C. 452 et seq.); (e) an educational service agency; or (f) a consortium of 2 or more of the entities described in (a) through (e).

Eligible Recipient - The term 'eligible recipient' means - (a) a local educational agency, an area vocational and technical education school, an educational service agency, or a consortium, eligible to receive assistance under section 131; or (b) an eligible institution or consortium of eligible institutions eligible to receive assistance under section 132.

Governor - The term 'Governor' means the chief executive officer of a state or an outlying

area.

Individual with Limited English Proficiency - The term 'individual with limited English proficiency' means a secondary school student, an adult, or an out-of-school youth, who has limited ability in speaking, reading, writing, or understanding the English language, and (a) whose native language is a language other than English; or (b) who lives in a family or community environment in which a language other than English is the dominant language.

Individual with a Disability - In general, the term 'individual with a disability' means an individual with a disability (as defined in section 3 of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102)).'

Individuals with Disabilities - The term 'individuals with disabilities' means more than one individual with a disability.

Institution of Higher Education - The term 'institution of higher education' has the meaning given the term in section 101 of the Higher Education Act of 1965.

Local Educational Agency - The term 'local educational agency' has the meaning given the term in section 14101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 8801).

Nontraditional Training and Employment - The term 'nontraditional training and employment' means occupations or fields of work, including careers in computer science, technology, and other emerging high skill occupations, for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field of work.

Outlying Area - The term 'outlying, area' means the United States Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Republic of the Marshall Islands, the Federated states of Micronesia and the Republic of Palau.

Postsecondary Educational Institution - The term 'postsecondary educational institution' means - (a) an institution of higher education that provides not less than a 2-year program of instruction that is acceptable for credit toward a bachelor's degree; (b) a tribally controlled college or university; or (c) a nonprofit educational institution offering certificate or apprenticeship programs at the postsecondary level.

School Dropout - The term 'school dropout' means an individual who is no longer attending school and who has not received a secondary school diploma or its recognized equivalent.

Secondary School - The term 'secondary school' has the meaning given the term in section 14101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 8801).

Secretary - The term 'Secretary' means the Secretary of Education.

Special Populations - The term 'special populations' means (a) individuals with disabilities; (b) individuals from economically disadvantaged families, including foster children; (c) individuals preparing for nontraditional training and employment; (d) single parents, including single pregnant women; (e) displaced homemakers; and (f) individuals with other barriers to educational achievement, including individuals with limited English proficiency.

State - The term 'state' unless otherwise specified, means each of the several states of the United States, the District of Columbia, the Commonwealth of Puerto Rico, and each outlying area.

Support Services - The term 'support services' means services related to curriculum modification, equipment modification, classroom modification, supportive personnel, and instructional aids and devices.

Tech-Prep Program - The term 'tech-prep program' means a program of study that (a) combines at least two years of secondary education (as determined under state law) and two years of postsecondary education in a nonduplicative sequential course of study; (b) strengthens the applied academic component of vocational and technical education through the integration of academic and vocational and technical instruction; (c) provides technical preparation in an area such as engineering technology, applied science, a mechanical, industrial, or practical art or trade, agriculture, a health occupation, business, or applied economics; (d) builds student competence in mathematics, science, and communications (including through applied academics) in a coherent sequence of courses; and (e) leads to an associate degree or a certificate in a specific career field, and to high skill, high wage employment, or further education.

Tribally Controlled College of University - The term 'tribally controlled college or university' has

the meaning given such term in section 2 of the Tribally Controlled College or University Assistance Act of 1978 (25 U.S.C. 1801 (a)(4)).

Tribally Controlled Postsecondary Vocational and Technical Institution - The term 6 tribally controlled postsecondary vocational and technical institution' means an institution of higher education (as defined in section 101 of the Higher Education Act of 1965, except that paragraph (2) of such section shall not be applicable and the reference to Secretary in paragraph (5)(A) of such section shall be deemed to refer to the Secretary of the Interior) that (a) is formally controlled, or has been formally sanctioned or chartered, by the governing body of an Indian tribe or Indian tribes; (b) offers a technical degree or certificate granting program; (c) is governed by a board of directors or trustees, a majority of whom are Indians; (d) demonstrates adherence to stated goals, a philosophy, or a plan of operation, that fosters individual Indian economic and self-sufficiency opportunity, including programs that are appropriate to stated tribal goals of developing individual entrepreneurship s and self-sustaining economic infrastructures on reservations; (e) has been in operation for at least 3 years; (f) holds accreditation with or is a candidate for accreditation by a nationally recognized accrediting authority for postsecondary vocational and technical education; and (g) enrolls the full-time equivalent of not less than 100 students, of whom a majority are Indians.

Vocational and Technical Student Organization - (a) In general, the term 'vocational and technical student organization' means an organization for individuals enrolled in a vocational and technical education program that engages in vocational and technical activities as an integral part of the instructional program; (b) State and National Units - An organization described in subparagraph (A) may have state and national units that aggregate the work and purposes of instruction in vocational and technical education at the local level.

Appendix A

Press Release Distribution for Open Hearings

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